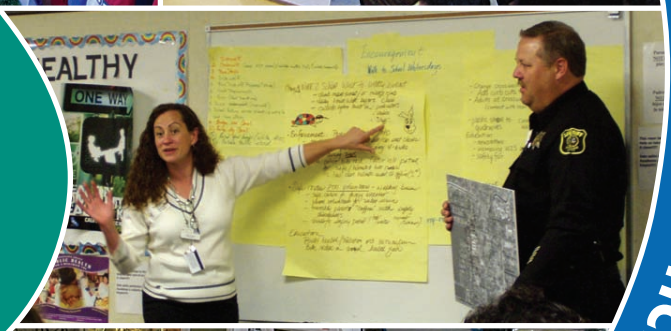
Safe

Healthy

Partnerships

Efficient Government



Stanislaus County

Public Health Report 2007

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Health Services Agency Public Health Division Administration
Mary Ann Lee, B.S., M.B.A. - Managing Director, Health Services Agency
Cleopathia L. Moore, P.H.N., N.P., M.P.A. - Associate Director, Public Health Division
John Walker, M.D. – Health Officer, Stanislaus County
Connie Maggi, M.D., M.S., M.P.H. – Assistant Health Officer, Stanislaus County
Phoebe Leung, B.S., R.D. - Assistant Director Public Health, Health Promotion
Nancy Fisher, B.S., P.H.N.- Assistant Director Public Health, Director of Nursing

830 Scenic Drive
Modesto, CA 95350
www.hsahealth.org

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A special thank you to those who contributed to the production of this document:

Editorial Committee:
Nancy Calderon
Nancy Fisher
Ken Fitzgerald
Phoebe Leung
Connie Maggi
Cleopathia Moore
John Walker

Contributing Authors:
Nancy Bancroft
Darian Bashaw
Melanie Briones
Renee Cartier
Christine Edwards
Elaine Emery
Julie Falkenstein
James Ferrera
Lenore Hawks
Jan Husman
Stephanie Kim
Kathy Kirros
Nancy Lazar
Laura Long
Karen Madden
Evelina McDowall
Trudi Prevette
Larry Sampson
Laura Tarlo
Christina Tipsword
Olivia Tong
Jean Yokotobi

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INTRODUCTION

Annual Report to the Board of Supervisors
Public Health Division
Health Services Agency
April 2007

The Public Health Division (PHD) has a staff of 227 fulltime and part-time employees with a broad representation of the racial and cultural diversity of our county. PHD is focused on serving the residents of Stanislaus County with the full range of services that encompass the TEN ESSENTIAL PUBLIC HEALTH SERVICES:

1. Monitor health status to identify and solve community health problems.
2. Diagnose and investigate health problems and health hazards in the community.
3. Inform, educate, and empower people about health issues.
4. Mobilize community partnerships and action to identify and solve health problems.
5. Develop policies and plans that support individual and community health efforts.
6. Enforce laws and regulations that protect health and ensure safety.
7. Link people to needed personal health services and assure the provision of health care when otherwise unavailable.
8. Assure competent public and personal health care workforce.
9. Evaluate effectiveness, accessibility, and quality of personal and population-based health.
10. Research for new insights and innovative solutions to health problems.

The PHD is dedicated to providing these services to a rapidly growing community that is experiencing significant demographic change. This county has more than doubled in population since 1980, reaching a population exceeding a half million residents. PHD has responded to the Board of Supervisors' revised priorities and this report is so structured.

Board Priority: A SAFE COMMUNITY

The events of September 11, 2001 have been addressed through the development of the Emergency Preparedness program within PHD. The Board of Supervisors allocated the initial funds to initiate this program in 2001 and, subsequently, it has been funded through the Centers for Disease Control (CDC) preparedness grant, the Metropolitan Medical Response System (MMRS) grant, and the Health Resources and Services Administration (HRSA) grant, which is primarily focused on development of programs within our hospital and clinic systems. The goals set forth in the CDC preparedness guidance for Public Health Emergency Preparedness include intervention and prevention efforts to ensure a safe community. (See Attachment A for specific goals).

The national theme of the American Public Health Association for April 2007 is preparedness with a special focus on special populations that include: expectant mothers, children, the elderly, residents with physical impairments, and those with language issues. This theme focus mirrors that of the Board of Supervisors and the Chief Executive Office, where emphasis is being placed on identifying the special population, and current and needed resources in an effort to prepare this group of citizens for any potential emergency in Stanislaus County.

In addition, PHD has been active in other programs to ensure a safe community. The Safe Communities Coalition was formed in 2001 and has sustained itself with broad representation

of law enforcement, hospitals, schools, and community-based organizations (see Chapter III). Moreover, the Keep Baby Safe Program, partially funded by the Stanislaus County Children and Families Commission, has been a long-standing program for infant car seat safety (see Chapter III).

Board Priority: A HEALTHY COMMUNITY

The Board of Supervisors has received annual updates on the PHD initiatives to enhance the health of the community and the Board is aware of very serious health issues that face this community. Annually, the California Department of Health Services publishes a ranking of counties as regards a number of health indicators. Unfortunately, Stanislaus County has a low ranking on a number of significant health indicators (see Appendix M). This report starts with highlights of the growing population and statistics that demonstrate birth, death, diseases and other occurrences within an average week in Stanislaus. Community collaboratives have been developed to address a number of these issues, including the Heart Education Awareness Resources Team (HEART) Coalition, the Asthma Coalition, the Hepatitis C Coalition, and the Communicable Disease Taskforce. A significant requirement of PHD is adherence to the California Health and Safety Code. Most of the dedicated funding is focused on control of communicable disease as well as maternal, child, and adolescent health. A major funding disparity is that currently the major diseases affecting this county are chronic disease and there is minimal funding to meet this increasing challenge to the community's health.

Board Priority: EFFECTIVE PARTNERSHIPS

As mentioned above, PHD has been active in numerous community collaboratives. The largest is the Mobilizing Action for Partnership and Planning (MAPP) project. This broad collaborative includes all of the key stakeholders in the public health system (see Chapter XI). Many aspects of public health are being addressed, including safety and emergency preparedness.

Board Priority: EFFICIENT DELIVERY OF PUBLIC SERVICES

PHD has been addressing numerous challenges including the difficulty in competing with salaries for nurses. The Division has been focused on leveraging productivity and efficiency with a number of systems upgrades. These include:

1. The Atlas software system-integrated computerized case-management system
2. The Electronic Death Registry-internet death registration system
3. WebvCMR- local disease surveillance reporting system
4. MTU Online-a clinical management tool for the Medical Therapy Unit

These system upgrades will also provide improved customer service. In order to meet the changing needs of the community and to provide efficient and effective services, PHD received approval for major organizational restructuring during February 2007.

In conclusion, the PHD is aware that the Board of Supervisors' priorities also prompt Stanislaus County departments to identify opportunities to transition from intervention to prevention. **Prevention is, in fact, the primary mission of PHD within the Health Services Agency.**

On an average week in 2006 …

518,445 Population

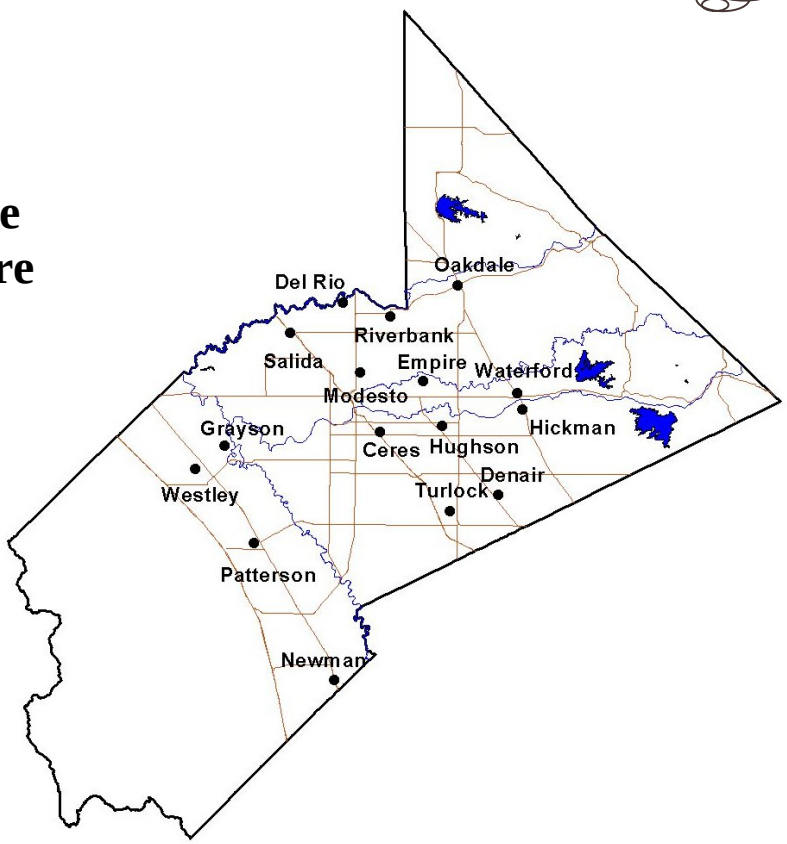
162 Births

72 Deaths

37 Pregnant women received late prenatal care

18 Teen Births

1 Infant Death



Heart Disease 24 deaths

16 Cancer deaths

2 Stroke Deaths

5 Unintentional Injury Deaths

Gonorrhea 8 cases

Chlamydia 35 cases

CHAPTER I: EPIDEMIOLOGY

There exists a common misconception that epidemiology is the study of epidemics, however, it is more than that. Epidemiology is the study of the causes of and distribution of disease in populations. Before this report goes into the specific programs that the Health Services Agency has implemented, here is an overview of the demographic, health and social characteristics of county residents in relation to the State of California.

General Characteristics for Stanislaus County in 2005

In 2005, Stanislaus had a total population of 506,000 people, with 49.5% males and 50.5% females. The population increased 12% between 2000 and 2005. The average age was 31.7 years while California's average was 34.3 years. Thirty three percent of the population in Stanislaus were under 19 years of age, 29% were between 25 and 44 years of age, and 10% were 65 years and older (Appendix A, Tables A.1, A.2). This is similar to that of California's, with one exception; California has a lower proportion of people less than 19 years of age (27%).

The proportion of males and females were approximately the same across all age categories, except for those 65 years and older, where 11% were females and eight percent were males. (Tables A.3, A.4)

Racial/ethnic distributions of the county are similar to that of California, except that the county has slightly more Hispanics and less Asians than California. Thirty eight percent of the Stanislaus population was Hispanic (Appendix B, Table B.1), which was higher than that of California (35%).

Eighty seven percent of the Stanislaus population was White, three percent was Black or African American, five percent was Asian, and three percent reported two or more races. The state had a much higher proportion of Asians (12%). (Tables B.2, B.3)

More can be learned about the community by looking at other characteristics, such as household income, rate of unemployment, and educational attainment and percentage of those dropping out of high school and comparing this information to that of the state. Compared to the State of California, the median household income and percentage of those attaining education past high school is lower. Additionally, the unemployment rate and drop out rate are higher than that of the state of California. (Appendix C)

Economic Characteristics

The median household income was $48,000 in Stanislaus, which was lower than that of California, at $54,000.

Eleven percent of families, 7% of married couple families and 29% of families with female householder were below the poverty level. Fourteen percent of the residents lived in poverty. In California, 10% of families and 13% of individuals lived below the poverty level.

In Stanislaus, of the 230,000 people who were in the civilian labor force, 11.5% were unemployed (n=26,000). In comparison, 7.3% of the people of California were unemployed (Appendix C, Table C.2). Further, the monthly unemployment rate for Stanislaus was higher than that for the State (Table C.3).

Across all ethnicities the County's percentage of those who dropped out of school is higher than that for California. The percentage of those dropping out is particularly high compared to California for whites and Asians (Table C.4).

A higher proportion of Grade 12 students in Stanislaus (9.0%) dropped out when compared to California, where only 6.1% of grade 12 students dropped out (Table C.5). 30% of people 25 years or older had at least graduated from high school in Stanislaus County, compared to 22% for California in 2005. (Table C.6)

Birth and Death Rates

Birth and death rates often indicate the growth and health of a community and tracking trends in these rates aids in social planning and allocation of social and medical services. The birth rate is calculated by dividing the number of live births in a population by the total population and is expressed as the number of live births per 1,000 people (Appendix D). The death rate is calculated by dividing the number of deaths in a population in a year by the total population and is expressed as the number of deaths per 1,000 population.

The birth rate for Stanislaus (16.4 per 1000) was higher than that of the state (15.1 per 1000). The mortality rate for Stanislaus (7.6 per 1000) was also higher than that of the State (6.7 per 1000).

Birth Rate and Death Rate, California and Stanislaus, 2003

	Live Births		Deaths	
	Number	Rate	Number	Rate
California	540,827	15.1	239,325	6.7
Stanislaus	8,022	16.4	3,741	7.6

Source: CA, DHS, Center for Health Statistics,

Mortality in Stanislaus

The leading cause of death in our county in 2004 was heart disease (atherosclerotic and ischemic), followed by lung cancer and chronic obstructive pulmonary disease. Other causes of death included stroke, Alzheimer and drug-related deaths. (Appendix E)

Leading Causes of Death in Stanislaus and California. 2004

Disease	Frequency, (%)	
	Stanislaus	California
Heart Disease		
Atherosclerotic heart disease	458 (12.23%)	23,831 (10.1)
Ischemic heart disease	249 (6.65%)	14,425 (6.1%)
Lung cancer (Bronchitis/Lung Neoplasm)	230 (6.14%)	13,329 (5.7%)
Chronic obstructive pulmonary disease	173 (4.62%)	10,212 (4.3%)
Stroke	120 (3.21%)	7,897 (3.4%)
Alzheimer	101 (2.70%)	6,884 (2.9%)
All drug-related deaths	85 (2.28%)	3,439 (1.46%)

Source: California Department of Health Services, Center for Health Statistics, and 2004 Death Statistical Master File

In Stanislaus, when considering causes of death, Latinos have the highest percentage of deaths due to stroke. At 17%, this rate was higher than the state (11%). On the other hand, only three percent of Latinos died from chronic obstructive pulmonary disease (Table E.1).

The state produces Regional Health Status Rankings for each county based on several health status indicators. The higher the ranking the worst the county is compared to the other 58 counties of California. A rating of 1 means a county is the best of all the counties in California. Stanislaus rankings for coronary heart disease, infant deaths and drug related death are high, indicating that compared to other counties we are much worse. In an effort to compare Stanislaus County to other counties with similar rural demographics, Butt and Modoc Counties were included for comparison to investigate drug-related and infant deaths. For coronary heart disease and white infant deaths, Stanislaus County ranks 3rd worst in the state of California. Compared to surrounding counties in the Central Valley, Stanislaus' coronary heart disease ranking is similar to Merced and San Joaquin Counties but drug related deaths and White infant deaths rankings are worse. Over the last seven years, the PHD has focused especially in reducing black infant death, and have made progress as black infant deaths ranking is much lower than the other two neighboring counties, showing the rate for Stanislaus is lower or better than these counties.

	Ranking				
Health Status Indicator	Stanislaus	Butte	Modoc	San Joaquin	Merced
Coronary Heart Disease Deaths	56	37	47	57	52
Infant Deaths: White	56	38	1	46	34
Infant Deaths: All Races	53	41	1	52	43
Drug-Related Deaths	51	55	39	43	13
Syphilis Incidence	49	-	-	43	1
Breastfeeding Initiation	48	39	8	49	43
Infant Deaths: Black	48	52	25	56	36
Adequate/Adequate Plus Care	47	26	36	55	48
Births to Mothers Aged 15-19 Per 1,000 Live Births	46	24	25	49	50

Finally, the rankings of some key health indicators of Stanislaus County are being compared to the State and to the Healthy People 2010 National Objectives. The Healthy People 2010 objectives are a set of health objectives created by the Federal government for the nation to strive towards over the first decade of the new century.

As can be seen in the graph below, the objectives for Coronary Heart Disease, Specific and Overall Infant Deaths, and adequate prenatal care have not been met. The objective for percentage of mothers breastfeeding has been met. While California also has not met these objectives, the State is closer to achieving the national objectives of heart disease and infant death than Stanislaus County.

Comparison of Stanislaus health indicator rates against Healthy People 2010 National Objective and California, 2006.

	Healthy People 2010 National Objective	California	Stanislaus
Coronary Heart Disease Deaths (Age-specific death rate)	162.0	164.7	222.3
Infant Deaths: White (Birth cohort infant death rate)	4.5	4.7	8.3
Infant Deaths: All Races (Birth cohort infant death rate)	4.5	5.1	5.4
Drug-Related Deaths (Age-specific death rate)	1.2	10.0	19.1
Infant Deaths: Black (Birth cohort infant death rate)	4.5	11.2	7.8
Syphilis Incidence (Crude case rate)	0.2	3.43	1.36
Births to Mothers Aged 15 – 19 Per 1,000 Live Births (Age-specific birth rate)	None Established	39.2	46.1
Breastfeeding Initiation (%)	75.0	83.7	81.0
Adequate/Adequate Plus Care (%)	90.0	78.3	69.1

SECTION I: A SAFE COMMUNITY

Chapter II: EMERGENCY PREPAREDNESS

Soon after the tragic events of September 11, 2001, the Stanislaus County Board of Supervisors approved initial funding for the Health Services Agency (HSA) Emergency Preparedness program. Since then the Emergency Preparedness (EP) Program has been integrating public health preparedness into the existing, overall emergency response infrastructure. This effort has been facilitated by the receipt of grants from various agencies including the Centers for Disease Control (CDC), the Health Resources and Services Administration (HRSA), the U.S. Department of Homeland Security, State of California Pandemic Influenza fund, and the Metropolitan Medical Response System (MMRS). These grant streams have allowed EP to expand preparedness activities and promote several of the Board of Supervisors established priorities. These priorities include 1) ensuring a safe community, 2) ensuring a healthy community, 3) forging effective partnerships, and 4) efficiently delivering public services.

Board Priority: A SAFE COMMUNITY

During 2006 and early 2007 there have been many opportunities for the EP program to contribute to the Board's priority for a safe community. A few examples are summarized below:

Extreme Heat Emergency

The cumulative effects of high day and night time temperatures in July 2006 were first felt with a soaring loss of local livestock compelling the declaration of a local emergency. Local animal rendering companies were beyond capacity to handle the influx of dead livestock and carcasses, necessitating the disposal in the landfill.

Shortly following the declaration of the agricultural emergency, it was realized that the effects of the heat were impacting the population as well. It was determined in a conference call initiated by the County Office of Emergency Services (OES) that a local emergency existed and the Emergency Operations Center (EOC) was activated. There were multiple issues that needed to be mitigated. Several skilled nursing facilities were at risk of losing their air conditioning systems and one floor within a facility lost air conditioning, requiring the relocation of patients to other facilities. This was a very complex patient disbursement issue because patients were being moved from lower levels of care into hospitals. Triggers and protocols were developed for possible evacuation of these facilities and relocation of patients. Bed status from other skilled nursing facilities needed to be collected. Cooling centers needed to be opened and transportation provided. Messages to the public needed to be developed. In response to these issues, the American Red Cross opened cooling centers, Public Health nurses assisted in staffing, and the City of Modesto arranged for transportation. An information hotline was established with a direct connect to transportation dispatch and information distributed to the media. The Health Emergency Alert Response (HEARD) database and fax blast system was used to contact the skilled nursing facilities to collect bed census. These activities were completed within hours of activation. Public Health played a pivotal role in this response with the Public Health Officer participating in the Multi-Agency Coordination (MAC) group, by establishing the hotline, through EP as a unit lead orchestrating protocol development, contacting skilled nursing facilities, and public health

nurses staffing the centers. The County's swift response set an example that was mirrored by the State days later.

Mark I Chemical Terrorism Antidote Kit: Training and Distribution

One component of the MMRS grant was to develop a pharmaceutical plan and purchase sufficient quantities of medications to provide care during the first 48 hours of a chemical or biological event. The goal was to provide pharmaceuticals for one thousand (1,000) victims of a chemical incident and for ten thousand (10,000) victims of a biological event. To meet the chemical pharmaceutical objective, EP purchased 3,000 Mark I kits. Mark I kits are auto-injector nerve agent antidotes of atropine and pralidoxime chloride (2-PAM). The quantity purchased is equivalent to three doses per person for the targeted one thousand possible victims.

During 2006, EP developed and presented a train-the-trainer course to first responder instructors on issues of how to store and administer the Mark I kits. Once the training had been completed, the kits were distributed to first responder agencies. These kits are now stored on first response vehicles in fire agencies, ambulances, Department of Environmental Resources (HAZMAT), bomb squad, and SWAT teams. EP packaged and provided the kits in Pelican boxes containing 12 kits per box (Minimum) or an optional pelican case containing 24 kits (Large). This provides antidote for 4-8 first responders.

Project Public Health Ready

During 2005, EP submitted a competitive application for Project Public Health Ready (PPHR). PPHR is a collaborative activity between the National Association of County and City Health Officials (NACCHO), representatives from the Centers for Disease Control and Prevention (CDC) and other partners. PPHR prepares local governmental public health departments to respond to emergencies and to protect the public through a competency-based training and recognition program. Through PPHR, local Health Departments (LHD) are required to develop and provide concrete evidence to demonstrate capability to respond to emergencies through an all-hazards response plan, competency-based training and exercise simulations.

PROJECT PUBLIC HEALTH READY

Health Services Agency was one of 30 Public Health Departments selected from the 120 nation-wide applications submitted. At the end of 2005, EP was given preliminary recognition as being "Public Health Ready," with the condition that further materials were to be submitted for completion. In the early part of 2006, EP re-submitted the final necessary documentation to be considered and the final designation of "Public Health Ready" was awarded in June 2006.

NIMS/SEMS training

Beginning in March 2006, EP began the process of training approximately 160 Public Health Division personnel in the National Incident Management System/Standardized Emergency Management System (NIMS/SEMS). NIMS is a comprehensive, national approach to incident management that is applicable at all jurisdictional levels and across functional disciplines. SEMS is similar and complimentary to NIMS and was adopted by the State of California to ensure that response agencies in California had a single, integrated emergency management system.

Courses were conducted on a monthly basis and were completed in August of 2006 resulting in the entire Public Health staff being trained in NIMS/SEMS.

Pandemic Influenza Tabletop Exercise

In May 2006 Emergency Preparedness conducted the Pandemic Influenza Tabletop Exercise that brought together 150 participants and observers from Federal, State, Regional, and local agencies to discuss and evaluate local planning for pandemic influenza. This was a full day tabletop exercise coordinated by EP and was funded through grants received from the Health Resources and Services Administration (HRSA) and the Centers for Disease Control (CDC).

In October 2006, the EP program collaborated with the Office of Emergency Services in presenting a Pandemic Influenza overview to the MAPP stakeholders work group, a collaborative of public, private, and community-based organizations (see Chapter XI)

Board Priority: A HEALTHY COMMUNITY

The electronic risk communication system developed by EP has been used to alert the county's healthcare community to emerging concerns. The HEARD (**H**ealth **E**mergency **A**lerting **R**esponse **D**atabase) fax broadcast system has 2,000+ participants, including physicians, clinics, acute hospitals, long term care facilities, school nurses, health executives, pharmacists, and veterinarians. Fax broadcasts have included:

- Potential Health Risk (formic acid spill along Highway 99 in Keyes)

- Meningococcal Disease Alert
- New Developments in TB Control, including TB Among Hmong Refugees
- Norovirus ("Stomach Flu") Outbreaks at Senior Living Facilities
- Wildfires & Human Health
- West Nile Virus Returns to Stanislaus County
- HIV Training for Clinicians
- Cold Precautions
- Health Care System Saturation

In addition, the EP program has contributed to the hotline messages in English and Spanish that are available to inform the public during times of emerging issues. Hotline messages have included information on West Nile Virus, Influenza Vaccine Availability, Heat Precautions, and Cold Precautions.

Board Priority: EFFECTIVE PARTNERSHIPS

Emergency planning historically originated within "first responder" emergency infrastructure (i.e. Office of Emergency Services, police, fire, EMS) and tended to focus on natural disasters likely to affect the population such as fire, floods, and earthquakes. Today, a dramatic paradigm shift now includes hospitals, clinics, long-term care, and public health within this first response community. As such, public health has actively participated in the planning and coordination for medical emergencies such as bio-terrorism or pandemic influenza.

Several effective partnerships are of particular note:
1. Emergency Preparedness Committee: includes State and local agencies, local area hospitals and health providers. (The full list is continued on page 94).
2. Health Executives Surge Capacity Roundtable: the roundtable meets annually to discuss issues of emergency preparedness. Members have elected to increase the frequency of meetings.

Board Priority: EFFICIENT DELIVERY OF PUBLIC SERVICES

The EP program continues to implement technologies to improve efficient communication, especially during emergencies. The HEARD fax broadcast system has been mentioned earlier. Other technologic upgrades include:

EAS Radio Deployment

According to U.S. Government published data, more than 80% of the nation's emergency alert activations are weather related. The National Weather Service transmits weather information nationally using Specific Area Message Encoding (SAME) code that tells the "who", "what", "when", "where", and "why" of an emergency alert. This code can alert the public within seconds of a pending, weather related emergency. A compatible code, called EAS (Emergency Alert System), has also been adopted by the Federal Communications Commission and deployed by broadcasters in 1997.

EP worked with the OES to identify a roster of emergency response personnel that would benefit from having EAS receivers deployed at their work locations. A listing of roughly 140 locations was compiled which included city government offices, emergency management, and

all of the fire stations within the county. EAS radios were purchased and distributed, with the majority of the radios in place before the end of 2006.

CAHAN (California Health Alert Network)

CAHAN is a web-based system administered by CDHS. It is an emergency alerting system which gives system administrators the ability to send out emergency alerts via phone, cell phone, fax, email, and pager to all registered users. Registered users maintain their emergency contact information via the Internet in a common, secure database. CAHAN users can maintain their credentialing and skills information as well as choose their preference of which method (phone, fax, cell, etc.) they wish for the system to contact them in the event of an emergency. CAHAN also gives users the ability to post documents and collaborate on health related emergency preparedness issues with users throughout the state. The system has been available for several years and a small number of public health, emergency, and hospital personnel have been using the system regularly. More recently, funding conditions have required that EP expand the use of CAHAN to cover more stakeholders.

During the second half of 2006, EP began the process of entering all Public Health employees into the CAHAN system. This process has been completed with the addition of roughly 160 Public Health personnel entered into the system. Monthly system drills have been proceeding since October 2006 and it is anticipated that CAHAN will begin roll out to the HSA clinic system during the course of 2007.

Stanislaus County has one of the highest rates of fatal and injury collisions in the State, since 1999. Although the number of children using car seats has increased, the number of those placed correctly in child safety seats has not improved at the same rate.

During the last thirteen years, 32 children, ages 0-6, have died in motor vehicle crashes in Stanislaus County. Many could have been saved by a car seat used and installed correctly. But, the statistics indicate that correct usage has slipped to a very marginal 5% percent.

Stanislaus County Keep Baby Safe Program Car Seat Surveys Children Under Four

DATE	TOTAL NUMBER CHILDREN	CHILD CAR SAFETY SEAT USED CORRECTLY	CHILD CAR SAFETY SEAT USED INCORRECTLY / MISUSE RATE	NO CHILD CAR SAFETY SEAT USED
1992	379	22%	51%	27%
1993	367	29%	48%	23%
1994	700	29%	50%	15%
1995	173	40%	49%	11%
1996	290	30%	59%	10%
1997	383	23%	67%	10%
1998	349	29%	64%	7%
1999	228	20%	75%	5%
2000	140	11%	94%	2%
2001	175	7%	85%	8%
2002	98	5%	90%	5%
2003	112	7%	85%	8%
2004	103	6%	85%	9%
2005	67	5%	84%	11%

Board Priority: EFFECTIVE PARTNERSHIPS

Safe Communities Coalition

In an effort to decrease the number of vehicle-related injuries and deaths, including those to pedestrians and bicyclists, through community involvement and agency collaboration within the county, the Safe Communities Coalition was established in 2001. The Safe Communities Coalition is comprised of a broad-based group of county leaders and citizens. The Coalition benefits greatly from the expertise of individuals who represent health care, law enforcement, neighborhood collaboratives, general community members, and community-based organizations.

Keep Baby Safe Project

In 2006, the Safe Communities Coalition focused on two major areas. The first area is child passenger safety. Through the Keep Baby Safe (KBS) program, which is administered by the Health Services Agency, and funded by the Stanislaus County Children and Families Commission, free classes are being offered to the community, to educate participants on the California Car Seat Laws, types of car seats, and proper installation of the various types of car seats. The classes are taught at the Health Services Agency and various community sites.

National Safe Kids reports only one out of every ten car seats are used correctly. KBS also provides free car seat inspections to the community, as well as conducts car seat check points in collaboration with law enforcement, to ensure the appropriate usage of child passenger restraints.

Results:

- 1,200 people attended the KBS class
- Provided 550 car seats
- Created two informational slides to educate the public on the importance of child passenger safety
- These slides, with the slogan of "Buckle Up, Every Ride, Every Time", were shown over 14,400 times at the Brenden Theater during the summer.

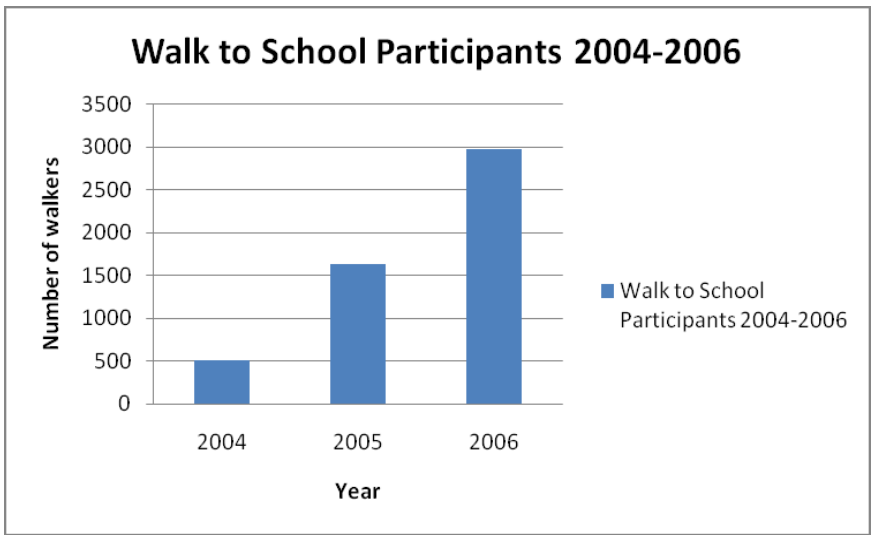
Walk to School Day

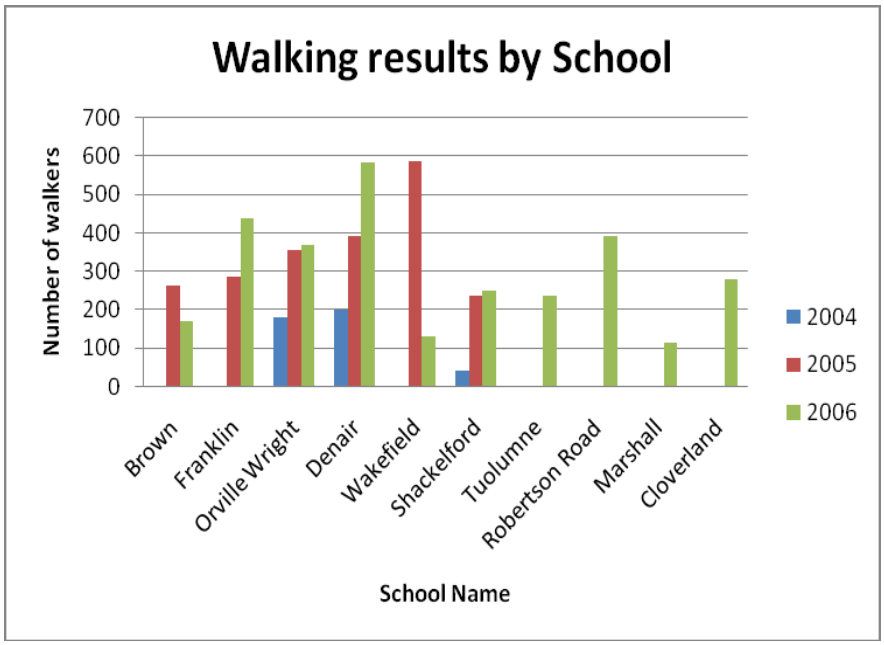
Another large project the Safe Communities Coalition coordinates is the annual Walk to School Day event. This is a national event started in 1997, by the Partnership for a Walkable America. The original idea was simply a day to bring community leaders and children together to create awareness of the need for communities to be walkable. Over the years, the concern has been broadened to include safer and improved streets, healthier habits, and cleaner air. Walk to School Day events are aimed at bringing forth permanent change to encourage a more walkable America — one community at a time. Walk to School Days are important to the community as the Safe Communities Coalition works to raise awareness of the safety issues children encounter everyday during their walks to school.

The Safe Communities Coalition started its participation in the Walk to School event in 2002, with one school. Participation in this event has increased steadily over the last four years. In 2004 there were 513 students from five schools. In 2005 eight schools participated and 1,638 students walked. 2006 was the most successful year, with ten participating schools and a total of 2,977 students walking. A promotional assembly was conducted at each participating school, in which coalition members, including a trauma nurse, a health educator and a local law enforcement officer, provided information on pedestrian and bicycle safety, and in addition, sound nutritional information. The assembly served to promote the upcoming Walk to School Day, which was held a few days after the assembly. Immediately after the walk, students were surveyed on how they liked the route, what they perceived as barriers to walking to school, and what improvements could encourage them to walk to school more often.

Results:

- 2,977 students from a total of 10 elementary schools throughout the County participated in the event.
- Participating schools include: Franklin, Shackelford, Orville Wright, Robertson Road, Tuolumne, and Marshall in Modesto, Brown and Wakefield in Turlock, Cloverland in Oakdale, and Denair in Denair.
- Feedback on barriers: too many dogs on the street, and too many speeders.
- Feedback on improvements: more parent participation in walking to school with the children, more help crossing streets.


Walk to School Participants 2004-2006
Number of walkers
3500
3000
2500
2000
1500
1000
500
0
2004
2005
2006
Year
Walk to School Participants 2004-2006


Walking results by School
Number of walkers
700
600
500
400
300
200
100
0
Brown
Franklin
Orville Wright
Denair
Wakefield
Shackelford
Tuolumne
Robertson Road
Marshall
Cloverland
School Name
2004
2005
2006

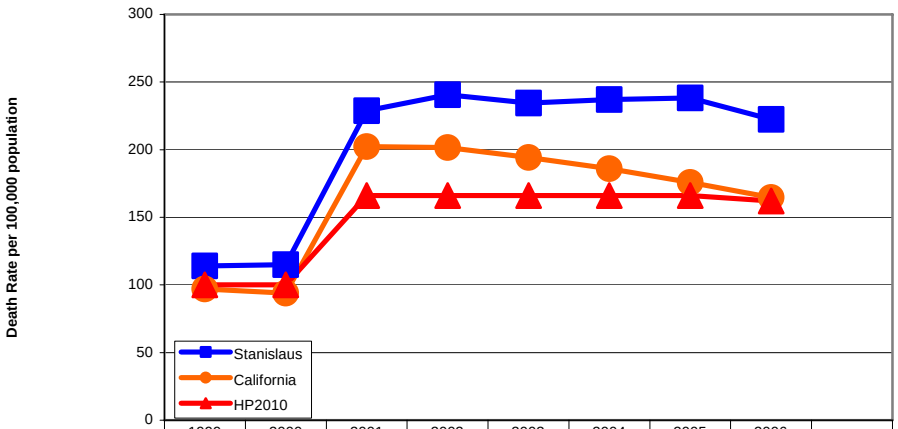
SECTION II: A HEALTHY COMMUNITY

CHAPTER IV: HEART DISEASE AND OBESITY PREVENTION

Heart Disease

In Stanislaus County and the State of California, more people die each year from cardiovascular disease (CVD) than from any other cause. Stanislaus County has consistently ranked among the top three worst counties in the State, in death rates due to heart disease, during the last decade.

Age-adjusted Rate due to Coronary Heart Disease, Stanislaus County and California, 1999-2006



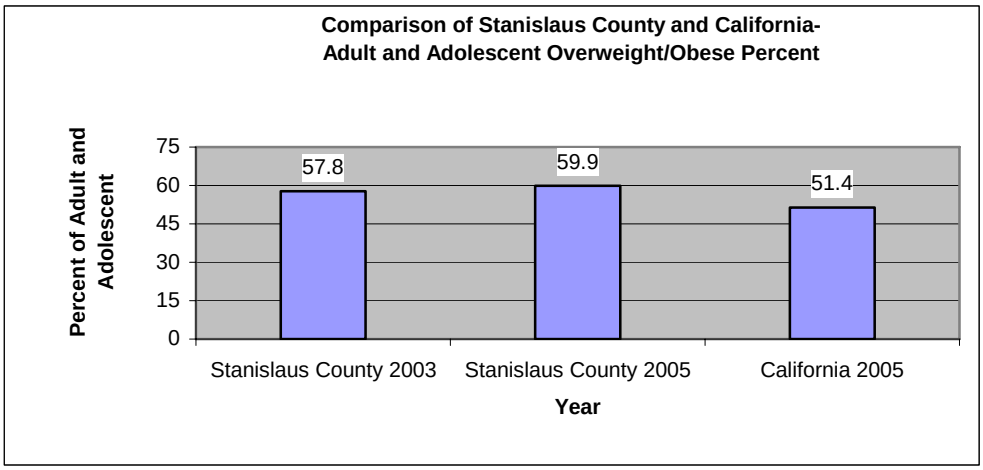
	1999	2000	2001	2002	2003	2004	2005	2006
Stanislaus	114	114.9	228.8	240.7	234.5	237.1	238.2	222.3
California	96.9	93.9	202.3	201.5	194.3	186	175.9	164.7
HP2010	100	100	166	166	166	166	166	162

Chronic diseases pose great impacts to health care costs, let alone the pain and suffering by individuals associated with them. As County residents live longer, the aging population's death rate due to CVD will rise if preventable steps are not taken to slow this trend.

Although the root causes of these statistics may not be identified, it is a known fact that the major ***preventable*** factors contributing to heart disease are unhealthy eating habits and lack of physical activity. These unhealthy lifestyle behaviors will lead to high blood pressure, high cholesterol, and diabetes, which are major risk factors for heart disease and other chronic diseases. It is crucial that prevention efforts start at the early age, and be focused on behavioral and lifestyle changes for both children and adults.

In the past year, HSA has been focusing on Obesity Prevention in addressing the prevention of heart and other chronic diseases.

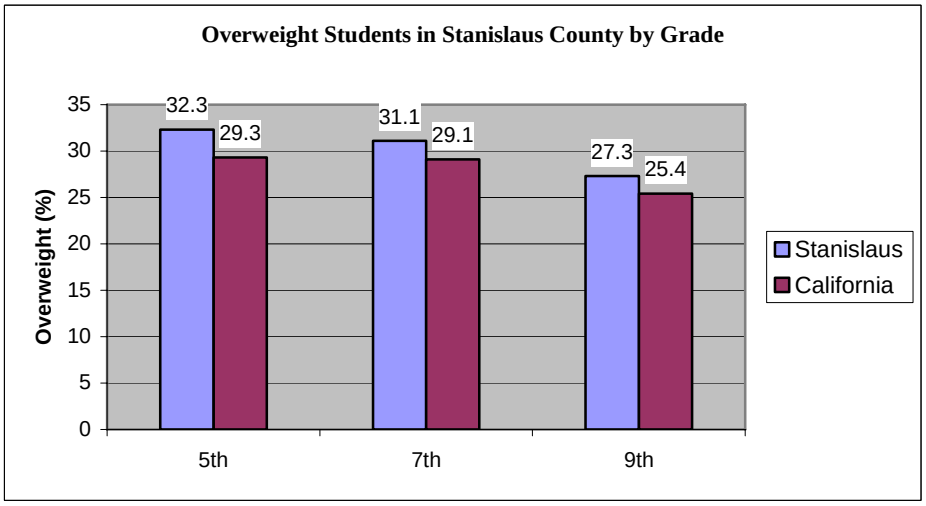
The Center for Disease Control and Prevention (CDC) has declared that obesity is a public health epidemic that cannot be ignored. More than 50% of California adults are overweight or already obese. Rates among African American and Latino adults, men over age 25 years, and adults with less than a high school education exceed 60%. Rates of physical activity and healthy eating have not improved significantly, and there is no sign that the increases in overweight or obesity are slowing.[1] In Stanislaus County, it is estimated that 60% of the adults are overweight and/or obese, and 5.6% of adults are diagnosed with Diabetes.[2]

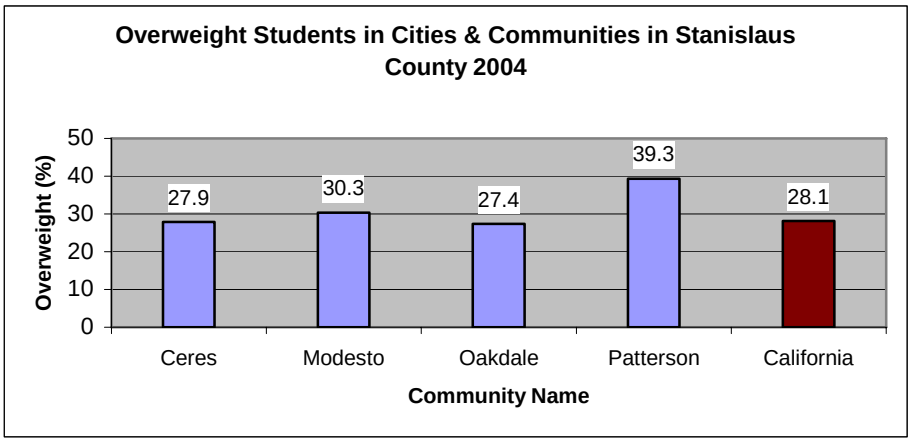


Board Priority: A HEALTHY COMMUNITY

Working with school children

According to a study conducted by the California Center for Public Health Advocacy, about 32% of 5th graders in Stanislaus County are estimated to be overweight, based on the Fitness Gram.[3] Overweight children face increased health risks and are being diagnosed with many serious health problems that are not typical nor expected to occur during childhood such as high cholesterol levels, type 2 diabetes, high blood pressure, depression, sleep apnea and others. Eighty percent of obese children become obese teenagers and grow up to be obese adults and develop chronic diseases such as diabetes, heart disease, osteoarthritis and congestive heart failure.



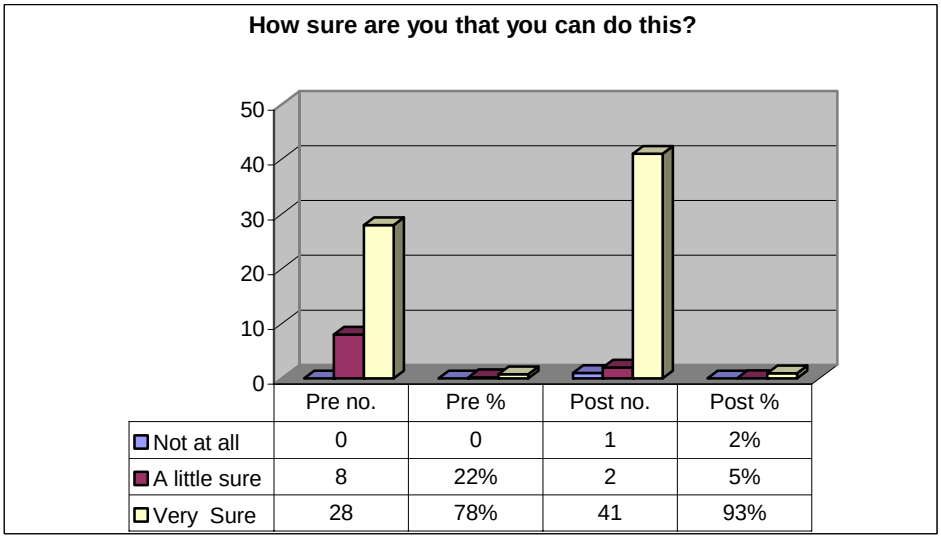


Project Healthy Kids Modesto at Robertson Road Elementary School
This project, sponsored by the Heart Education Awareness Resource Team (HEART) Coalition, was a weeklong day camp, targeting overweight and at risk for overweight elementary school children. The goal of the project was to help children and parents learn and establish healthy lifestyles, while having fun. The curriculum objectives focused on directly involving children to observe and practice healthy behavior. Activities include nutrition classes, physical activities, food demonstration and preparation, supermarket tour, and sports demonstration such as rock climbing, karate, tennis, and baseball.

Results:

- 48 children participated in this program.
- Participants were assessed on their behavior and knowledge pre and post program. A notable change was the number of participants who had indicated they were "very ready to change", after participating in the program, increased from 28 to 41. Accounting for the additional completed post assessments, six children moved from "a little sure" to "very sure" in their responses.

Figure: Readiness for Lifestyle change



	Pre no.	Pre %	Post no.	Post %
Not at all	0	0	1	2%
A little sure	8	22%	2	5%
Very Sure	28	78%	41	93%

Working with Employers and Employees

According to the Health Management Associates (HMA) study, in 2000, the cost of physical inactivity, obesity, and overweight was estimated at $21.7 billion. This includes direct and indirect medical care, workers' compensation, and loss of productivity. The annual costs of physical inactivity were estimated at $13.3 billion, obesity at $6.4 billion, and overweight at $2.6 billion, totaling to $21.68 billion in California in 2000. Of this burden, approximately $3 billion is shouldered by federal, state, and local government to cover their respective workforces. The HMA study also estimated that a five percent improvement in the rates of physical activity and healthy weight over five years could save more than $6 billion, while a ten percent improvement could save nearly $13 billion.[4]

It is important for employers to realize that there are many benefits to help employees adopt and maintain healthy lifestyles. Because the adult population spends a majority of their waking hours on the job, the workplace has become a significant setting for offering prevention programs. Further, worksites can offer technical advantages that foster health behavior change.

Employee Health Week 2006
With the Board of Supervisors' support for Employee Health Week in February of 2006, HSA Nutrition and Health Promotion staff provided:

- 5 presentations to various county departments to promote healthy behavior and practices in the workplace. These departments include DER/Parks, the Library, Auditor Controller, and Child Support Services. It is estimated that a total of about 200 employees attended.
- 2 Healthy at Work sessions were provided for county employees at the annual Health and Safety Fair. A total of more than 400 employees were trained in these sessions, where they received information and resources on adopting healthy lifestyles.

Healthy HSA Initiative
HSA started the implementation of the Healthy HSA campaign in 2005 to promote healthy eating and increased physical activity among HSA employees. The following activities were implemented during this annual 4-month campaign, (from February to May):

- Employees receive weekly tips via HSA internal communication channels on healthy eating and active living for themselves and their family members.
- A physical activity challenge was implemented. . In 2006, 12 employees participated in this friendly competition, logging on a total of 23,046 minutes of activities in one month.
- Tips and resources are also posted on the HSA website.

The Women Infants and Children (WIC) Nutrition Program

WIC is the Special Supplemental Nutrition Program for Women, Infants, and Children. This 100% federally funded program serves pregnant and breastfeeding women, and their children up to the age of five who are at-risk, and of low income (up to 185% of the federal poverty level).

The program is unique among federally administered food programs in that it provides food specific nutritious food prescriptions – WIC checks, redeemable at grocery stores – to its

target population as an adjunct to ongoing health care. Basic nutrition education, along with breastfeeding promotion and support are core WIC services. Another primary goal of the program is to facilitate access to preventive health and social services.

Stanislaus County Health Services Agency WIC program currently has a caseload of 18,550 program participants per month. The vouchers printed provide over $1 million dollars each month for the local vendors. The Program also participates in the summer WIC Farmer's Market program and provides an additional $25,000 worth of vouchers for the farmers during the market season.

The WIC program embarked on a statewide initiative, focusing on the emerging obesity crisis, with a focus on breastfeeding as the initial prevention effort in this crisis.

Breastfeeding Promotion
Breast milk is rich in nutrients, provides protection against many common childhood ailments, and is a proven practice for setting a foundation for healthy eating and obesity prevention at all stages of childhood. The goal of this strategic area is to promote exclusive breastfeeding as the norm and to support informed and appropriate complementary infant and toddler feeding.

Breastfeeding has long been recognized as a proven disease prevention strategy. A recent analysis, which included 61 studies and nearly 300,000 participants, showed that breastfeeding consistently reduced risks for overweight and obesity. The greatest protection is seen when breastfeeding is exclusive (no formula or solid foods) and continues for more than 3 months. Key government agencies and professional groups, from the CDC to the American Academy of Pediatrics (AAP), now recognize the breastfeeding-obesity link. Experts at CDC estimate that 14% to 20% of obesity in children could be prevented through breastfeeding. Increasing breastfeeding in California could mean between 36,000 to 48,000 fewer overweight children and adolescents.

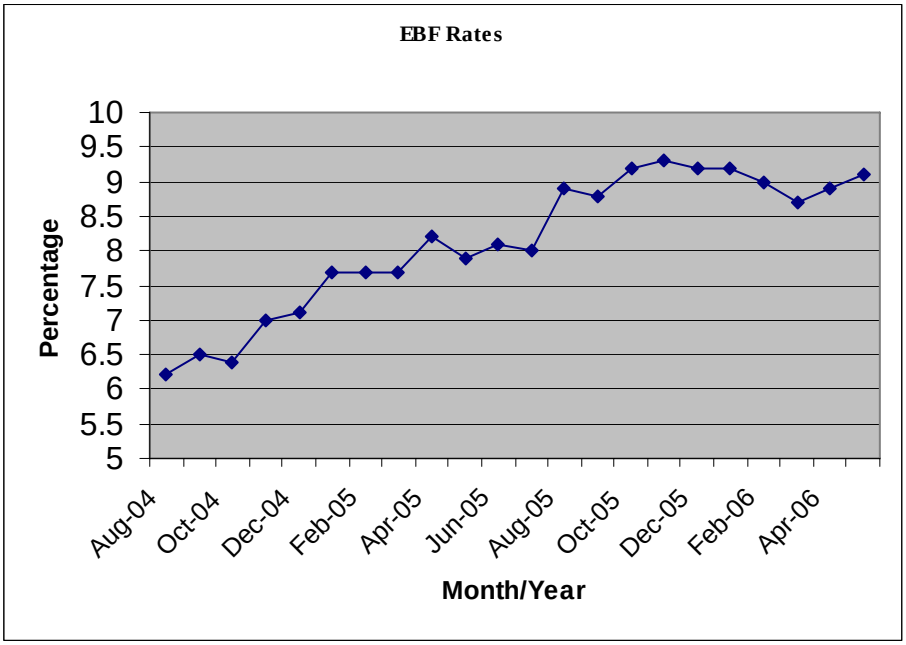
Strategies implemented by the WIC Program to increase the rate of exclusively breastfeeding women are**:**

- Staff trained at the International Board Certified Lactation Consultant training
- Ongoing monthly, short trainings for staff on breastfeeding promotion topics
- Created an internal breastfeeding promotion team consisting of Community Health Worker IIs, Public Health Nutritionists, and a Lactation Consultant
- Created a "Warmline" ($70 one time cost for phone installation, and $15 per month for phone line), which is managed and maintained by staff. WIC moms can call this dedicated phone number and experienced staff will return the call within 24 hours to answer questions and assist with breastfeeding problems. Calls have been numbering around 80/month. The majority of the calls are from Spanish-speaking clients. Results indicated that the rate of breastfeeding women has increased.
- Coordinated an annual Breastfeeding Celebration for all WIC breastfeeding moms and families. In the last 2 years, over 160 breastfeeding moms and family members attended.
- Provide incentives for exclusively breastfeeding moms who reach certain milestones.

Results:

- The rate of Hispanic Women who Exclusively Breastfeed (EBF) at 6 months, increased from 8.1% to 9.9% (2005-2006).
- Overall, the exclusively BF rates of WIC mothers increased from 7.9% to 9.1% (2005-2006). The State's average is 11%.

EBF Rates of Women in the Stanislaus County Health Services Agency WIC Program



Promoting regular physical activity and ensuring healthy eating as the norm for WIC families
In California, more than 425,000 children younger than 6 years of age are overweight and the number continues to climb at a staggering rate. Without help, these children will enter their teens having already suffered from over a decade of poor health. They will face chronic problems that, until recently, were seen only in adults, such as weight-related diabetes, and joint problems, high blood pressure, and high cholesterol.

Weight control programs show little success among children, and as the years go by, these children are more and more likely to grow up to be obese adults. Educating and supporting the parents on how to eat a more healthful diet and make more informed choices when it comes to what foods to buy and how to prepare them is an important goal. In addition, promoting and supporting increased physical activity and active living as the norm for WIC families are encouraged.

2006 data showed that 20% of the children participating in the WIC Program are overweight or at risk of being overweight.

- Overweight: $\geq 95^{th}$ percentile (BMI-for-age) for children 24 months or older.
- At Risk of Overweight: $\geq$ 85% percentile (BMI-for-age) for children $\geq$ 24 months of age.

Details for % of overweight WIC children in each town are shown below:

Town	Percentage Overweight WIC children
Ceres	22%
Crows Landing	18%
Denair	14%
Empire	16%
Grayson	10%
Hickman	33%
Hughson	20%
Keyes	19%
Modesto	19%
Newman	20%
Oakdale	23%
Patterson	23%
Riverbank	23%
Salida	22%
Turlock	18%
Waterford	25%
Westley	26%
Total: (2,123/10,572)	**20%**

Activities implemented:

- Provided nutrition education classes, using "Learner Centered" approach where the WIC client is allowed to choose the topic of discussion
- Staff trained on "Motivational Interviewing" techniques
- Number of "Fit Kids" (obesity prevention classes) increased and offered at many sites – topics included physical activity promotion and healthy eating
- Applied for and was awarded special pilot project grant focusing on "Learner Centered" trainings
- Continue to train staff on breastfeeding promotion (the **first** obesity prevention strategy)
- Provided nutrition education classes for the Healthy Birth Outcome project participants and childcare providers, focusing on breastfeeding promotion and appropriate infant feeding practices
- Actively participating in the Breastfeeding Coalition and provided resources and trainings to local obstetricians and pediatricians

Board Priority: EFFECTIVE PARTNERSHIPS

Under the Board of Supervisors' priority of Effective Partnerships, the goals are to evaluate new and existing opportunities for effective partnerships. It is imperative that HSA develop effective partnerships within this community to meet the functions of assessing and protecting the public's health. HSA has a well-established network of partners, which include other county departments, community based organizations, area hospitals, health care providers, health plans, the schools and higher education, law enforcement, neighborhoods, grass root

organizations, and the media. The Agency either calls on partners, or responds to their requests, to collaborate on projects and community wide initiatives.

Healthy Eating Active Living – Community Health Initiative

The Healthy Eating Active Living – Community Health Initiative (HEAL-CHI) is a five-year project funded by Kaiser Permanente to the West Modesto King Kennedy Neighborhood Collaborative (WMKKNC). The overall goal of this initiative is to create an environment that supports healthy eating and physical activity in an effort to decrease obesity and diabetes in West Modesto residents. This goal is to be accomplished by achieving critical changes in public policy, organizational practices, and community environment, through the school system, worksites, the healthcare setting, and the neighborhood. The strategy is to use a multi-sectoral approach, focusing on systems change and policy development in these four specific sectors.

HSA, representing county government, is considered by the funder to be a major partner of this initiative, and part of the steering committee. HSA represents both the healthcare provider sector and the workplace sector. In addition, with HSA's well-developed relationship with the WMKKNC and other community partners, the HSA was asked to take the lead in providing technical assistance and resources for this project.

The Agency assisted with the planning and development of the Community Action Plan during the past year. This Plan details the specific activities for the next four years. HSA will be heavily involved in the implementation of these activities, with such goals as implementing childhood obesity screening guidelines in the clinic system, developing healthy worksite policies, and increasing access to healthy foods for residents of underserved communities.

Implementation of these activities begins in 2007. In this partnership, HSA will be receiving $153,842 for calendar year 2007, to perform the specific public health activities outlined in the action plan. These activities include:

- Working with Modesto City Schools to implement their wellness policy and Physical Education standards,
- Working with area employers to develop policies which promote healthy eating and physical activity practices at the workplace,
- Working with healthcare providers, including HSA's Paradise Medical Office, to implement screening tools and standards of care for childhood obesity prevention, and working with neighborhoods to improve their access to healthy foods, such as developing a farmers market.

County Nutrition Action Plan

Stanislaus County was selected as one of three counties in California to implement a pilot project called County Nutrition Action Plan (CNAP). This program was initiated by the US Department of Agriculture (USDA), in response to a Congressional report seeking greater collaboration among nutrition assistance programs. California complied with this request and started meetings at the State level in 2003, to establish a state plan. Since then, local counties are asked to follow suit. Stanislaus County, known to the State for local partnerships and collaboration, was selected to be one of three pilot counties, and funded $10,000 to implement this partnership at the local level.

These food assistance programs not only provide nutritious foods to eligible participants to help them grow, learn, and fight hunger, they also help the County's economy by providing reimbursable revenue to foods served and purchased, in addition to generating extra revenues by the ripple effect when a food assistance program participant makes a purchase at a local grocery store. It is estimated that every $1.00 of food stamp purchases will generate another $1.84 of other purchases. In addition, every $1.00 spent in WIC foods generates another $6.00 of other purchases at the grocery store. Underutilization of these food assistance programs will lead to loss of federal dollars to this County, creating negative economic impacts.

PHD is tasked to facilitate this local collaboration, which was started in June of 2006. The collective goal is to increase fruit and vegetable consumption for program participants, with focus in the following areas for each of these programs: increase program participation, consistent nutrition education messaging, supporting policies, and promoting agriculture. The first priority for the CNAP partners is to increase program participation, which can lead to a positive economic impact to this County.

Below is a table describing the local partnerships and their respective program functions:

Participating Agency	Programs	Serves
Area Agency on Aging	Senior Meals Program	Provides hot and nutritious meals to low-income seniors, either at congregate sites or by home delivery.
Central California Child Development Services	Child Care Food Program – Migrant Head Start	Provides healthy foods to over 6,000 children in childcare centers
Community Services Agency	Food Stamp Program	Increases food purchasing power for 66,000 low income residents per month
Cooperative Extension	Food Stamp Nutrition Education Program	Provides nutrition education to food stamp recipients
FRAMAX	Child Care Food Program	Provides reimbursements for healthy foods to over 5,000 children in childcare facilities
Health Services Agency	California Nutrition Network (CNN)	Creates partnerships and provides nutrition education so that low income residents are enabled to adopt healthy eating and physical activity patterns, to prevent obesity and other chronic diseases
Health Services Agency	Women, Infants, and Children (WIC)	Provides supplemental food and nutrition education to 18,550 women,

Participating Agency	Programs	Serves
	Nutrition Program	infants and children each month. 60% of infants born in Stanislaus County participate in the WIC Program
Modesto City Schools	School Nutrition Programs and Summer Food Service Program	Serves nutritious school meals (lunch and breakfast) to eligible school children in the Modesto City School district. The Summer Food Service Program provides free meals and snacks to students when school is not in session.
Salida Union School District	School Nutrition Programs and Summer Food Service Program	Serves nutritious school meals to school children within the Salida School District. The Summer Food Service Program provides free meals and snacks to students when school is not in session.
Turlock Unified School District	School Nutrition Programs and Summer Food Service Program	Serves nutritious school meals to school children within the Turlock School District. The Summer Food Service Program provides free meals and snacks to students when school is not in session.

Results:
Since the start of this project in June of 2006, this partnership had accomplished some significant results:

1. Increased knowledge:
   - Each of these nutrition assistance programs now has increased knowledge and understanding of each other's program guidelines, operations, and challenges. This knowledge enables all the partners to support and promote each other's services.
2. Collaboration:
   - WIC and Network staff provide food demonstrations at the Food Stamp office, promoting healthy cooking and teaching participants how to shop for fruits and vegetables. This in turn helps increase Food Stamp participation.
   - Network staff is partnering with the senior meals program in providing nutrition education classes to the seniors at various nutrition sites.
3. Increased Fruit and Vegetable consumption:
   - All three school districts are providing salad bars in their school cafeteria.
   - Salida school district has experienced a 12% increase in the students' consumption of fruits and vegetables.
   - Senior meals are including more fruits and vegetables in their menu.

- Head Start is exploring Farm to School program, promoting the usage of local farmer's produce.

Heart Education Awareness Resources Team (HEART) Coalition

As mentioned earlier, cardiovascular disease is a major problem in this county. To combat this preventable disease, HSA led the development of the HEART Coalition in 1999. The mission of the HEART Coalition of Stanislaus County is *to reduce cardiovascular disease risk factors to improve the health status and quality of life of the residents of Stanislaus County by increasing public awareness, promoting prevention and education and coordinating and directing accessible community resources.* Coalition members, made up of over twenty partners from the community, include area hospitals, health care providers, health plans, education, community based organizations, local businesses, and concerned residents.

Members of the HEART Coalition continue to be active since its inception. Every year, Coalition members select a project to implement in the community. Member organizations donate funding and resources for the maintenance of the Coalition, as well as the implementation of activities.

In 2006, the Coalition reached out to Robertson Road Elementary School in an effort to tackle the childhood obesity epidemic. The Project Healthy Kids Camp fundraising effort was able to bring in over $20,000. Being able to raise this significant amount of money demonstrates the importance of having and developing effective partnerships. With this money the HEART Coalition was able to put on a week long camp at Robertson Road Elementary School.

The camp highlighted the importance of being physically active, eating healthy and self-esteem building. Students were able to try activities they normally do not have access to. They especially loved participating in rock climbing. Through the Heart Coalition's effort, forty-five children and twenty parents were able to participate in this camp and the parent education classes. Based on follow up data, it was demonstrated that the children did learn about healthy lifestyle choices.

Coalition future plans are to incorporate this type of program into the After School Program. Working with the Administrator of Intervention Programs with Modesto City Schools, the HEART Coalition hopes to teach students about physical activity and nutrition, as they do not get much exposure to this information during the regular school day.

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[1] California Department of Health Services, Public Health Institute. The Economic Costs of Physical Activity, Obesity, and Overweight in California Adults: Health Care, Workers' Compensation, and Lost Productivity. April 2005.
[2] California Food Policy Advocates. 2005 County Nutrition Profile: Stanislaus County.
[3] California Center for Public Health Advocacy. Overweight and Unfit Children in California Legislative Districts, 2003.
[4] California Department of Health Services, Public Health Institute. The Economic Costs of Physical Inactivity, Obesity, and Overweight in California Adults: Health Care, Workers' Compensation, and Lost Productivity. April 2005.

CHAPTER V: TEEN PREGNANCY

Teen pregnancy has serious consequences for the teen mother, the child, and for society in general. Reducing Stanislaus County's rate of teen pregnancy is one of the most strategic and direct means available to improve overall child well being and to reduce persistent child poverty.

Teen pregnancy can have adverse consequences for the mother.

*** Future prospects for teenagers decline significantly if they have a baby.** Teen mothers are less likely to complete school and more likely to be single parents. Less than one-third of teens who begin their families before age 18 ever earn a high school diploma and only 1.5% earns a college degree by the age of 30.

***There are serious health risks for adolescents who have babies.**

Common medical problems among adolescent mothers include poor weight gain, pregnancy-induced hypertension, anemia, and sexually transmitted diseases.

*** Teen pregnancy is closely linked to poverty and single parenthood.**

Almost one-half of all teenage mothers and over three-quarters of *unmarried* teen mothers begin receiving welfare within five years of the birth of their first child. The growth in single-parent families remains the single most important reason for increased poverty among children over the last twenty years.

Teen pregnancy causes adverse consequences for the child.

*** Children born to teen mothers suffer from higher rates of low birth weight and related health problems.** The proportion of babies with low birth weights born to teens is 18 % higher than the proportion for mothers age 20-24. Low birth weight raises the probabilities of infant death, blindness, deafness, chronic respiratory problems, mental retardation, mental illness, and cerebral palsy. In addition, low birth weight doubles the chances that a child will later be diagnosed as having dyslexia, hyperactivity or another disability.

*** Children of teens often have insufficient health care.** Despite having more health problems than the children of older mothers, the children of teen mothers receive less medical care and treatment.

*** Children of teen mothers often receive inadequate parenting.** Children born to teen mothers are at higher risk of poor parenting because their mothers — and often their fathers as well — are typically too young to master the demanding job of being a parent. Still growing and developing themselves, teen mothers are often unable to provide the kind of environment that infants and very young children require for optimal development.

*** Children with adolescent parents often fall victim to abuse and neglect.** A recent analysis found that there are 110 reported incidents of abuse and neglect per 1,000 families headed by a young teen mother. By contrast, in families where the mothers delay childbearing until their early twenties, the rate is less than half this level — or 51 incidents per 1,000 families. Similarly, rates of foster care placement are significantly higher for children whose mothers are under 18.

* **Children of teenagers often suffer from poor school performance.** Children of teens are 50 percent more likely to repeat a grade; they perform much worse on standardized tests; and ultimately they are less likely to complete high school than if their mothers had delayed childbearing.

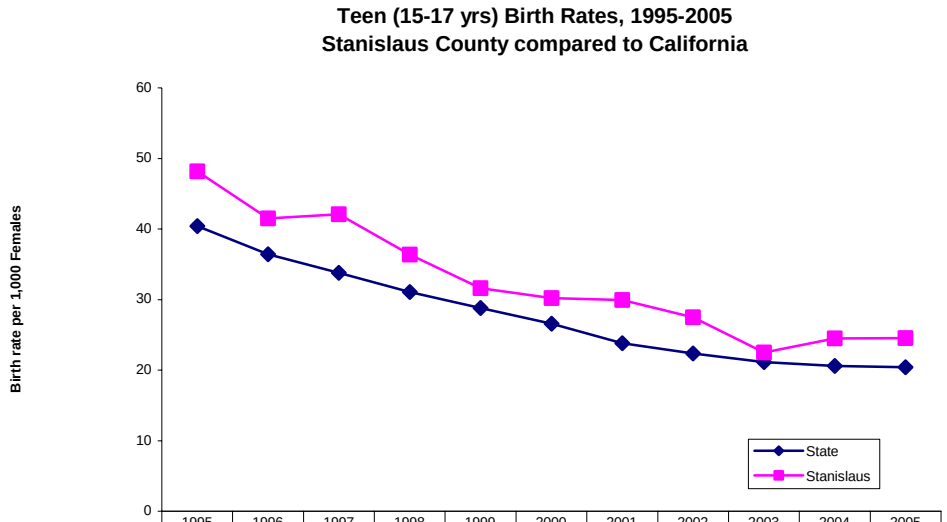
Teen Pregnancy's impact on society

* **Teen pregnancy costs society billions of dollars a year.** There are nearly half a million children born to teen mothers each year. Most of these mothers are unmarried, and many will end up poor and on welfare. Each year the federal government alone spends about $40 billion to help families that began with a teenage birth.

* **Teen pregnancy hurts the business community's "bottom line."** Too many children start school unprepared to learn, and teachers are overwhelmed trying to deal with problems that start in the home. Forty-five percent of first births in the United States are to women who are either unmarried, teenagers, or lacking a high school degree, which means that too many children — tomorrow's workers — are born into families that are not prepared to help them succeed. In addition, teen mothers often do not finish high school themselves. It's not easy for a teen to learn work skills and be a dependable employee while caring for children.

Statistics

Less sexual activity among teens and increased contraceptive use have both contributed to the encouraging declines in the teen pregnancy and birth rates. In literally every region of the state, teen birth rates have declined over a four-year period. And while the statewide decrease of 8 percentage points between the years 2000 and 2004 is encouraging, rates remain unacceptably high, tallying taxpayer and societal costs of more than $3.4 billion a year. The teen birth rate in Stanislaus County has been declining for the last 15 years.



	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
State	40.425658	36.438713	33.801628	31.054652	28.803792	26.557644	23.808934	22.355244	21.118871	20.593788	20.392039
Stanislaus	48.152174	41.474654	42.070551	36.358458	31.606833	30.201342	29.909417	27.464443	22.507529	24.487603	24.536655

Stanislaus is considered to be an "Improving County" in a 2004 report published by the Public Health Institute. In 2000, the county's teen birth rate was 55.6 and in 2004 it declined by 8% to 47.6. This is still higher than the state rate of 39.7 and places Stanislaus 13th highest out of the 58 counties.

In 2005, there were 968 births to teens (13-19) in Stanislaus County. See Appendix F – Teen Births & Costs by California Counties (2004) and Teen Births by Age and Zip Code of Residence of all Births, Stanislaus County, 2005.

The public sector costs by young teens (those aged 17 and younger) having children are particularly high. The National Campaign to Reduce Teen pregnancy estimates that the public sector costs for these births are an average of $4,080 per mother annually. If this figure is applied to the 340 births that occurred in 2005 to teens 13 –17, the cost to the county was $1,387,200.00 and this is just for one year.

A new group of children become teenagers each year. It is estimated that by 2010 the number of girls' aged 15-19 is projected to increase by 2.2 million. This means that prevention efforts must be constantly renewed and reinvented.

Priority Board: A HEALTHY COMMUNITY

This Board of Supervisors Priority is the primary premise upon which all prevention activities to address teen pregnancies are based. The Stanislaus County Public Health Division has been a leader in the community in dealing with the prevention of adolescent pregnancy. The PHD has had an uninterrupted contract with the California Department of Health Services for Information and Education grant monies for the past twenty-six years. The PHD is an original Community Challenge Grant contractor and has maintained funding through the Office of Community Challenge Grants for the last 8 years. Through the years staff has provided both school and community based education on adolescent sexuality for thousands of county residents. The program, which has the primary responsibility for pregnancy prevention education programs, is called the R.E.A.L. Project (Responsibility, Education, Attitude and Learning).

The overall approach of the R.E.A.L. Project in reaching its goal to reduce the number of teen pregnancies in Stanislaus County is to provide comprehensive primary and secondary prevention programs that are supported by the community and its institutions. The interventions are culturally sensitive, age appropriate and based on solid theoretical models. PHD realizes that there are no single or simple interventions that will significantly reduce adolescent pregnancy. Therefore, the PHD has striven to incorporate a variety of approaches that help young people "postpone, prepare, protect, and plan" their reproductive lives. All pregnancy prevention programs need to take into account that teens exhibit different levels of risk. Some teens need fewer or less intensive interventions, while others need more balanced, and ongoing sexuality education. For teens who are sexually active, access to contraceptive services is necessary to prevent pregnancy or sexually transmitted diseases. For teens that have had one or more births, extensive family planning counseling and support services are needed to help delay or reduce subsequent teenage births. For most teens, family life education and health services must be linked with programs that help motivate teens to delay pregnancy and early childbearing. In addition, the belief is important to recognize that individual teens need different interventions at different points during adolescence. Thus, during the early years of puberty, teens are most likely to benefit from clear and consistent

messages about abstinence. As they progress through adolescence, teens are more likely to become sexually active and will need clear, consistent, and medically accurate messages about effective contraceptive use and protection from STD's and HIV infection as well as information on the benefits of abstinence. Teen parents require yet another set of interventions, including childcare, social services and job training.

During the 2005-2006 fiscal year the R.E.A.L. Project provided the following pregnancy prevention programs for teens in Stanislaus County:

1. **Teen Outreach Program (TOP)-** TOP is a proven primary prevention and school based successful approach. It is developmentally appropriate and includes four different levels of lesson plans geared to ages 12-18. TOP is 17 hours in length and includes life skills such as decision-making, goal setting, communication and assertiveness, values clarification, adolescent growth and development and sexuality education. TOP was implemented with 9th grade students at Patterson High School.
   400 students participated in the program

2. **Reducing the Risk (RTR)** – RTR is a 5-hour school-based curriculum designed for 10th grade students. It emphasizes avoiding unprotected sex either through abstinence or through contraceptive use for those who choose to be sexually active. Discussion of sexuality, reproduction and contraception is made relevant to each individual, while role playing allows participants to model and practice healthy behaviors, Participants discuss social pressures, negotiation skills and pregnancy prevention.
   2,800 high school students throughout the county participated in the program

3. **Straight Talk** - Straight Talk is a twelve-hour curriculum developed for use with high-risk adolescent boys. Currently young men are referred to this program through the Stanislaus County Probation Department. The program provides young men with information on sexuality issues, improves skills in establishing healthy relationships, goal setting and decision-making and promotes respect and responsibility.
   50 young men participated in this program

4. **Streetwise to Sexwise:** This is a five-hour curriculum specifically designed for use with high-risk youth. This curriculum is implemented with youth incarcerated in Juvenile Hall and at several alternative high schools throughout the county. With regard to sexuality, many high risk youth begin to have sexual experiences at an early age, have more experience with sexual behavior than accurate knowledge, have never discussed sexuality in a positive, open and honest atmosphere with a knowledgeable adult; often have negative feelings about sexuality and themselves and often engage in sexual behaviors to satisfy non-sexual needs.
   550 youth participated in this program

5. **Postponing Sexual Involvement (PSI)** –PSI is a five-hour curriculum with the goal of preventing pregnancy and sexually transmitted infections. The program covers information and skills designed to help youth resist social

pressures to become sexually involved, decision making and information on anatomy, physiology of the reproductive system. R.E.A.L. project staff presents this program to 7th and 8th grade students at 12 junior high schools throughout the county.

3,000 junior high students participated in this program

The R.E.A.L. Project believes strongly that the adults in the community must be involved and committed to the reduction of adolescent pregnancies. Healthy parent-child communication can be a critical component in helping youth reduce or avoid sexual risks. Open communication between parents and children is extremely valuable and many young people say they want to be able to talk with their parents about sexuality. Unfortunately, most parents report that they do not know what to say and that they feel uncomfortable talking with young people about intimate issues. According to a recent survey conducted by the California Wellness Foundation, 67% of parents say it is hard for them to talk with their children about sexuality, 98% of parents say they need help in communicating better. In order to meet this need, the project works with Modesto City Schools Healthy Start sites and other community based organizations to implement **Hablando Claro/Speaking Clearly** workshops for parents of adolescents. These workshops increase parental knowledge regarding sexuality issues and capacity to communicate effectively with their teens about sexuality, development and future goals.

75 parents participated in this program

Health teachers and school nurses receive little training or information on adolescent sexuality issues. Staff works with the head of the Modesto City Schools Office of Curriculum Development and offer a 6-hour teacher training every school year. This is a very important component in reducing teen pregnancy in the community. It is critical to have well trained staff, integrated into the school system that feels comfortable and competent in teaching adolescents about sexuality. Outside programs that come and go with fluctuating dollars and funding cycles should not be relied upon when building a strong health curriculum in the schools. This year's training covered updates on all contraceptive methods, STI's, HIV/AIDS, reproductive health services for youth in the county, and the education code as it relates to sexuality education in the classroom

47 teachers attended this training

Teen pregnancy is closely linked to a host of other critical social issues — welfare dependency and overall child well being, out-of-wedlock births, responsible fatherhood, and workforce development in particular. The Public Health Division believes that preventing teen pregnancy should be viewed not only as a reproductive health issue, but also as one that works to improve all of these measures. Simply put, if more children were born to parents who are ready and able to care for them, a significant reduction in a host of social problems afflicting children, from school failure and crime to child abuse and neglect would be seen. This report has brought good news to the Board. Both teen pregnancy and birth rates have declined in all age and racial/ethnic groups. However, this progress in preventing teen pregnancy can have a downside if it means that the public, policymakers, and the media begin to believe that the teen pregnancy problem has been solved. The hard truth is that yesterday's good news about declining teen pregnancy and birth rates will not mean much to the boys and girls who turn 13 next year. The County must guard against complacency, and must redouble efforts to convince each new group of young people that it is in their own self-interest and that of future generations to avoid early pregnancy and childbearing.

Priority Board: EFFECTIVE PARTNERSHIPS

The Board of Supervisor's Priority of Effective Partnerships has been and continues to be important in the prevention of teen pregnancy. Because Teen Pregnancy is one of those issues that impact an entire community, it is imperative that everyone within a community becomes involved. Partners are critical to the PHD's ability to implement and sustain prevention activities in the county. Private, public, faith-based and community based partners have contributed to the success of improving teen pregnancy rates. Some partners serve as contractors and assist in providing education to parents and teens, while others serve as conveners, provide space, schedule workshops and review curriculum. (A complete list of partners in the Teen Pregnancy Education Team is included in the Partnership Section).

CHAPTER VI: FETAL AND INFANT MORTALITY STUDY

Board Priority: A HEALTHY COMMUNITY

Part of ensuring a Healthy Community is conducting ongoing surveillance of diseases and conditions affecting the health of the community. The infant mortality rate (determined by the number of infant deaths under the age of 1 over the number of live births) is often used as an indicator of the health of a community. County ratings from 2006 show infant mortality to be a problem in Stanislaus County.

These ratings also rank the county compared to the other 58 California counties on health indicators. The rates and rankings are based on Birth and Death certificate data from 2001-2003, which was the most recent data available at that time.
Stanislaus County ranks as follows (58th being worst):

- 53rd (6th worst) for overall infant mortality
- 56th (3rd worst) for White Infant deaths
- 48th for Hispanic Infant deaths
- 34th for Black Infant deaths

The nationally recognized Healthy People 2010 objective for Infant Mortality is 4.5 deaths per 1,000 live births. Stanislaus County's infant mortality rate is higher for overall infant deaths, Hispanic infant deaths, and White infant deaths than the State and National rates.

2006 County, State & National Infant Mortality Rate*

	County Rate	State Rate	National Rate
Overall	7.3	5.3	7.0
White	8.3	4.7	5.8
Hispanic	6.6	5.1	5.6

* based on 2001-2003 Birth/Death Certificate Data

As a result of these alarming ratings, the Health Services Agency, with a grant from the Stanislaus County Children and Families Commission, studied factors and reasons for the high infant mortality rate in order to be better able to address this problem.

The study team used a comprehensive approach including a variety of different research methods beyond information gathered from birth and death certificates. These research methods include both retrospective (the analysis on the birth/death cohort data and chart abstraction) and prospective (interviews with parents that have experienced a fetal or infant loss) methods. The findings from these sources were combined to better understand the infant mortality problem in the county. The research methods utilized were:

- *Exploratory Analysis:* Focus groups.

- *Preliminary analysis of birth/death cohort data:* Birth death cohort data from 2000-2002 were analyzed. This analysis also compared live births (babies who did not die within a year of birth) to fetal and infant deaths.

- *Chart abstraction of Fetal/Infant deaths from 2005*

- *Trend Analysis*: This examines rates of disease and death across a time period.

- *Fetal Infant Mortality Review (FIMR) Interviews:* This nationally recognized interview tool is used with mothers who have experienced a fetal or infant death. Mothers that experienced a fetal or infant death during 2006 or 2007 are being interviewed. These data are not included in this report as this part of the study is ongoing.

Board Priority: EFFECTIVE PARTNERSHIPS

The first, and one of the most important components of the study, was to develop effective partnerships with the community, especially the hospitals. The hospitals' collaboration is vital to the study because staff need medical records of fetal/infant deaths for the year on which to perform chart abstraction, as well as referrals for FIMR interviews. Meetings were planned with the major hospitals in the county to introduce the infant mortality problem and the study. The directors of the departments that come into contact with pregnant women and women experiencing a fetal or infant death (Obstetrics/Gynecology; Neonatal Intensive Care Unit, Pediatrics) were present.

The Medical Records Department was also included in these meetings. The response from the hospitals was very positive and numerous meetings have followed with their staff, including opportunities through Perinatal Morbidity and Mortality conferences, to educate hospital staff and medical personnel on the problem. The building of these partnerships has led to easier access of medical records for any fetal or infant death in 2005 or 2006.

STUDY FINDINGS

The study findings can be summarized into the following areas: prenatal care, adequacy of prenatal care, obesity, premature labor (gestational age and birth weight), placental infections, and alcohol, drug and tobacco use. Below are the results from the chart abstraction concerning each of the above areas.

Overall study sample size = 53 cases

- Fetal sample size = 21 cases
- Infants Deaths surviving less than (<) 24 hours sample size = 15
- Infants Deaths surviving greater than (>) 24 hours sample size = 17

Prenatal Care

A low percentage of women who had a fetal/infant death in 2005 initiated prenatal care during the 1st trimester. One of the Healthy People 2010 objectives is for 90% of pregnant women to enter prenatal care during the first trimester. The baseline from 1998 for the nation found that 83% of pregnant women entered prenatal care during the first trimester.

- Only 62.3% (33) of the overall study sample initiated prenatal care during 1st trimester.
- Women who experienced infant deaths were more likely to initiate prenatal care during the 1st trimester than those who experienced fetal deaths in this study. 80% (12) of infants surviving less than 24 hours and 64.7% (11) of infants surviving greater than 24 hours initiated prenatal care in the 1st trimester while only 47.6% (10) of fetal deaths did.

- There were more women who experienced fetal deaths than infant deaths in the study who received no prenatal care. 14.3% (3) of fetal deaths, 6.7%(1) of infant surviving less than 24 hours, and 5.9% (1) of infants surviving greater than 24 hours did not receive prenatal care.

Adequacy of Prenatal Care

Adequacy of prenatal care was measured for this study using the already established Kessner Criteria, which recommends a specific number of prenatal care visits based on gestational age. The Healthy People 2010 objective is for only 90% of pregnant population to receive adequate prenatal care. Less than half of the women who experienced a fetal/infant death in 2005 received adequate prenatal care.

- 47.6%(10) of fetal deaths, 33.3% (5) of infant surviving less than 24 hours, and 47.1% (8) of infants surviving greater than 24 hours had inadequate prenatal care.

Obesity

Being overweight or obese is linked to pregnancy and delivery complications including maternal hypertension, preeclampsia, gestational diabetes, cesarean section, stillbirth, and birth defects. Body fat is measured by Body Mass Index (BMI), which is based on pre-pregnancy height and weight. BMI categories indicate obesity and are as follows:

- Normal weight: BMI = 18.5-24.9
- Overweight: BMI = 25-29.9
- Obese: BMI >30

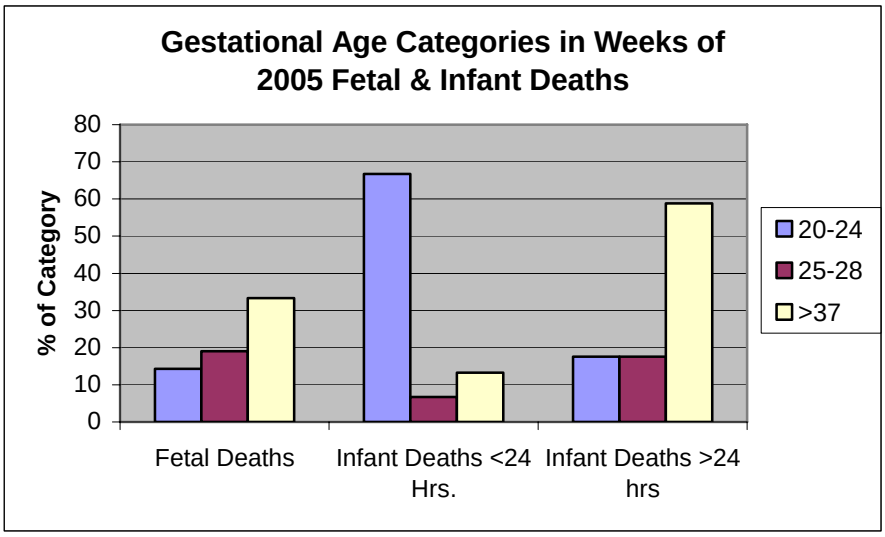
A woman's pre-pregnancy BMI categorization will help determine how much weight should be gained during pregnancy.

- Normal BMI: gain 25-35 lbs.
- Overweight BMI: gain 15-25 lbs.
- Obese BMI: gain 15 lbs

A large percentage of the women who experienced fetal/infant deaths in this sample are either obese or overweight. See Appendix G – Graphs representing Weight Categories of Mothers who experienced Fetal Deaths

Premature Labor: Gestational Age

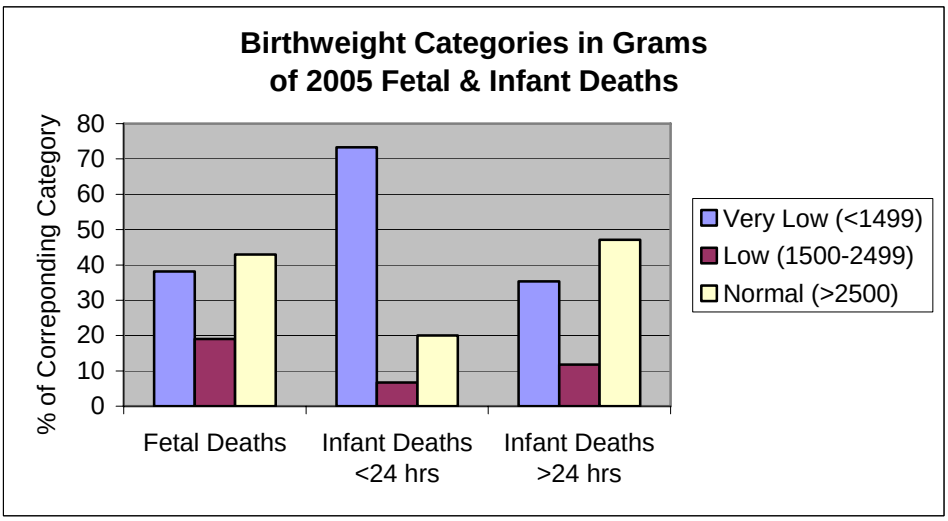
Infants born greater than or equal to 37 weeks gestational ages are considered full term. Infants born before 37 weeks are premature. The majority of infant deaths surviving <24 hours are very premature, 20 – 24 weeks gestation. One third of Fetal Deaths were full term. Infant Deaths surviving >24 hours were mostly 37 weeks gestation or greater.



* Infant's 29-37 weeks gestation not shown

Premature Labor: Birthweight

An infant born at weights less than 2500 grams, approximately 5 ½ pounds is considered low birth weight. Weights over 2500 grams is termed appropriate for gestational age. Over 73% of Infants surviving less than 24 hours were very low birth weight and one third of Infant Deaths surviving less than 24 hours were less than 499 grams.



Placental Infections

Placental infections are any inflammation of fetal membranes as documented in the pathology report. Placental infections can result in premature labor. Treatment includes antibiotics and delivery.

- Placental infections can lead to serious complications during delivery and in the newborn.
- Placental infections were reported in: 53.3% (8) of infant deaths surviving less than 24 hours and in 33.3% (7) of fetal deaths.

Alcohol and Drug Use

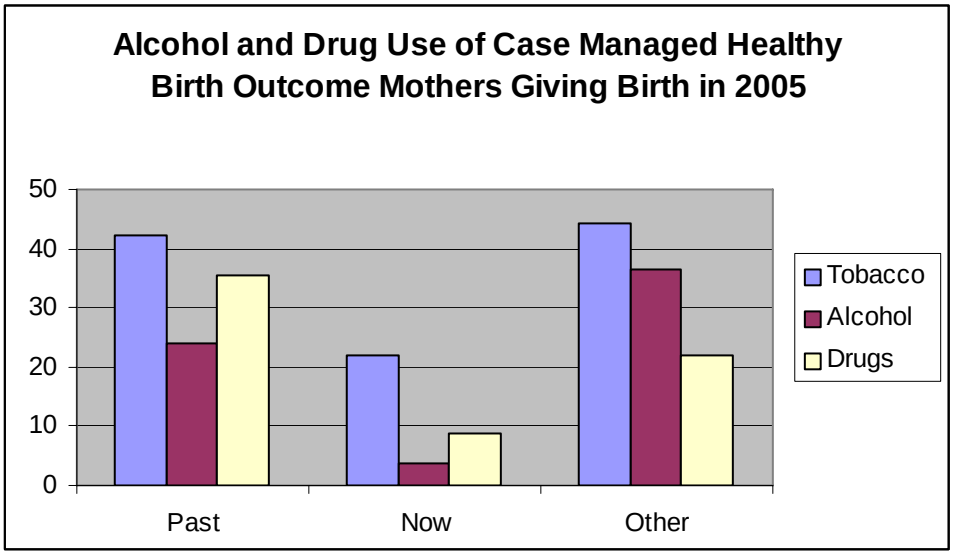
Alcohol and drug use can have an adverse outcome on both the pregnancy and the infant after delivery. In soliciting reasons for the high infant mortality rate from the community, drug abuse is also one of the most commonly given reasons. Information about drug and alcohol use is taken from the medical records during the chart review process. Women are only screened for drugs at delivery if they are suspicious (late entry into prenatal care, track marks, homeless, etc.). As predicted, few (32.1%) women in the study were tested for drugs although 84.9% were verbally screened about drug use. There were few positive results/responses. Out of those tested, 7.5% (4) were positive. Of those verbally screened, 13.2% (7) admitted drug use during pregnancy, 3.6% (2) admitted drug use prior to pregnancy. Only one mother admitted alcohol use during pregnancy. Over twenty percent (11) admitted smoking during pregnancy.

In an effort to assess if this is an accurate reflection of the alcohol and drug use of pregnant women in Stanislaus, staff decided to obtain data from a different source to gain another perspective on alcohol and drug use in pregnant women in the county. Healthy Birth Outcomes (HBO) is a program within the PHD Community Health Services that case manages socially and medically high-risk pregnant women.

Staff compared all the women who were case managed by HBO and who gave birth to babies in 2005, with the results of the chart review results from 2005. Cases managed clients answer detailed questions about whether they have in the past or are currently using drugs, alcohol and/or tobacco. They are also asked if their parents or partners use alcohol, drugs or tobacco. The HBO data found drug use in pregnant women in Stanislaus County.

- There is a high usage of drugs, tobacco in the past for these women.
- When pregnant at intake some HBO clients are still smoking (22.1%) and doing drugs (8.7%).
- HBO clients also have partners or family members that smoke, drink and use drugs.
- Of the women in the HBO program who have positive birth outcomes, 91.3 % (95) have babies born full term (greater than 37 weeks gestation).
- They also have a high rate of normal birth weight babies with 90.4% (94) being appropriate for gestational age.

These numbers show the beneficial impact of the HBO program. It also confirms that delivery records may not represent accurate assessments of drug and alcohol use. The graph below shows the past, present and other usage of tobacco, alcohol and drugs of these clients. The category of “other” includes use by parents and/or partner.



Trend Analysis

Trend analysis confirms the county's problem with premature births. Preterm births increased significantly in the State, Region, and County. However, the overall County increase was almost four times greater than rates of change for either the State or Region. This region is the San Joaquin Perinatal Region and includes Stanislaus, Fresno, Kern, Kings, Madera, Merced, San Joaquin, and Tulare counties.

After the 2005 study was completed, the preliminary findings were first presented to a focus group of medical providers to obtain their feedback, comments and suggested recommendations from the findings. The presentation was successful, and valuable input was received from the medical community. Several additional presentations on the 2005 Fetal Infant Mortality Study were done with different groups of community stakeholders including the Stanislaus County Children and Families Commission.

Recommendations were made on each of the topics:

Prenatal Care

- Make sure that women receive adequate prenatal care and follow through with all recommended prenatal visits.
- Examine alternative models of prenatal care such as the Centering Model to increase the rate of women receiving adequate prenatal care.

Obesity

- Counsel overweight/obese women about appropriate weight gain during pregnancy.
- Provide weight guidance preconceptually to all women of childbearing age.

Premature Labor

- Provide more education on signs and symptoms of premature labor and methods of preventing pre-term labor.
- Provide education on fetal movement during the latter part of 2nd trimester.
- Teach women when to seek medical attention if fetal movement decreases.

Alcohol and Drug Screening Recommendations

- Universal routine screening, testing and education regarding drug and alcohol use.
- Consider using Dr. Ira Chasnoff's 4 P's Plus screening tool.
- Refer women who use substances to appropriate treatment resources.

Placental Infection

- Improve screening and reporting of Group B Strep status prenatally.
- Monitor incidence of placental infection in county.
- Educate women about placental infections and their significance in birth outcomes as well as signs and symptoms of infection.
- Explore medical therapies and/or interventions for placental infections during pregnancy.

Autopsy/Aftercare

- Review the way that autopsy requests and results are presented.
- Ensure that requests and results are presented in a culturally competent and sensitive manner.

Final Recommendation

- Continue to examine fetal and infant mortality and the factors identified in this study.Also, examine live births in county to create a control/comparison group.

Funding has been received for an additional year to continue the study. Staff continues to work with the hospitals to receive referrals for women and families that have had an infant die and to do chart review. Chart review on women that have had positive birth outcomes to establish a control group to compare with and refine study results is being done. The FIMR interviews are also continuing for 2006 deaths to provide more detailed data for the study.

CHAPTER VII: HEALTHY BIRTH OUTCOMES

Healthy Community; Effective Partnerships; Efficient Delivery of Public Services: Healthy Birth Outcome (HBO) work and outcomes come under these three Board of Supervisor priorities in Stanislaus County.

The impetus for this program came from disturbing figures received in 2002-2003 regarding the infant mortality rate in Stanislaus County. Over the past two decades, there have been significant reductions in U.S., California, and Stanislaus County infant mortality rates, primarily due to improved survival of low birth weight infants. Despite these improvements Stanislaus County infant mortality rates had been consistently worse than state and national infant mortality rates. From 1990 to 2000, infant mortality rates dropped from 7.33 to 5.07 infant deaths per 1000 births in the state, yet Stanislaus County's infant mortality rates only dropped from 8.09 to 7.04 during that same time period.[5] Stanislaus County exceeds the Healthy People 2010 national objective of 4.5 infant deaths per 1000 births.[6]

Infant mortality is closely associated with low birth weight. Low birth weight children are at greater risk of experiencing developmental delays, congenital anomalies, hearing and vision problems, cerebral palsy and other problems.[7] These children may need special education services.[8] Low birth weight infants are often born too soon or premature, which can also lead to increase likelihood of babies having medical problems, and/or death in the first year of life.[9] Preterm babies can suffer numerous problems and have cognitive and motor skill deficits.[10] It can also cause increased stress for families. In 2005 the economic burden of preterm births was estimated at $26.2 billion, or $51,600 per infant, according to a 2006 report from the Institute of Medicine of the National Academies.

There have been numerous programs in Stanislaus County that have attempted to address some aspect of prenatal, infant, and child health preventative health care services. What had been lacking was a comprehensive approach to this problem in our county, a program that would focus not only on women at risk, but would increase awareness and access to resources for individuals, families, communities and providers in the county. In 2003 a successful application was made to the Stanislaus County Children and Families Commission for a multi-year grant to address this problem.

Board Priority: A HEALTHY COMMUNITY

Healthy Birth Outcomes Project goal is to improve birth and child health outcomes by increasing the number of babies born at term and at adequate weights in the county and improve family functioning and maternal/child support systems.

The program consists of three components:

Intensive case management services:

- Provided by a multidisciplinary team consisting of public health nurses, community health workers and social workers. Intended to provide services to high-risk women enrolled during pregnancy and followed until their child is 12 months of age.
- Assures services to those women of highest risk with such medical problems as diabetes, substance use, behavioral health issues, family violence, or adolescents, or a combination of both.

- Provides individualized assessments/screenings of a pregnant woman's needs, development of a service plan and linkage to other services such as WIC, Medi-Cal, housing and employment assistance, etc.
- Ensures education/guidance/reinforcement regarding pregnancy, infant care, safety, healthy eating, breastfeeding and other health related topics.

Community based services:

- Services provided in communities with community facilitators.
- Increases social support to pregnant women through group intervention.
- Increases education to women in their neighborhoods about the importance of seeking prenatal care and early and consistent health care.
- Improves prenatal care access.
- Improves the understanding of risk factors impacting their pregnancies and measures to reduce them.
- Increases access to social services and Medi-Cal.

Provider/County Outreach:

- Reaches out to providers to inform them on infant mortality rates/maternal child health data in Stanislaus and solicit their involvement in addressing the problem.
- Increase knowledge of resources available to them for working with pregnant women, particularly those at high risk of adverse outcomes.
- Provide referral information on issues such as substance use, family violence or behavioral health issues.
- Improves outreach in demographic areas with high-risk populations and provides information regarding maternal/child health issues/resources.

Board Priority: EFFECTIVE PARTNERSHIPS

- Partnerships are currently maintained with six communities:
    1. Oakdale Family Support Network
    2. Airport Neighbors United
    3. Ceres Partnership for Healthy Children
    4. West Modesto King Kennedy Neighborhood Collaborative
    5. Newman Family Resource Center
    6. Riverbank Casa del Rio

Additional partners are being added through Stanislaus County Children and Families Commission during the next fiscal year.

Collaborative activities with these partners include:

- Increases the community partner's capacity to serve as resource centers in their communities.
- Improves response to pregnant women and families.
- Improves the linkages among pregnant women, social and health services.
- Increases the services provided to pregnant women and families
- Increases knowledge, understanding of health issues and self-sufficiency of communities.

- Increases the Agency's ability to leverage internal resources.
- Improves communication regarding community needs and Agency resources.
- Increases outreach and education within the communities.

Provider/County Outreach

One of the most crucial involvements to improving infant mortality is that of the provider community. Agency/PHD staff has effectively worked with hospitals and private providers in trying to understand causes and solutions to address the issue in Stanislaus County**.** The results are:

- Increased awareness of the infant mortality/low birth weight/ pre-term labor rates in the county, especially as it relates to the surrounding counties.
- Increase knowledge of how to access/refer their patients to services.
- A Pregnancy Services and Resource Guide was created, in response to survey results by providers, asking for their needs.
- Public health staff have contacted providers and provided resources for pregnant women 167 times.
- 15,000 Women's Health Newsletters distributed over 46 programs/sites.
- An Infant Mortality Study was started, as a result from the request by HSA and the Stanislaus County Children and Families Commission, to attempt to find answers for Stanislaus County's poor infant mortality rates.
- Maternal Child and Adolescent Health Advisory Board was created, which is composed of representatives from health care/prenatal providers, HSA, health insurance, schools, WIC, and community partners. Members meet regularly to address the needs of pregnant women in the community by working with service providers to decrease barriers and improve access.
- Provider subgroup: Assessing Obstetricians (OB) providers no show rates and what they do to bring women back into prenatal care.
- Community subgroup: Planning potential media campaign based on Infant Mortality Study Results.
- Teleconferencing instituted for providers who are unable to attend on- site meetings with Maternal Child Health Advisory Board.
- Home Visitors meetings: Networking with other home visitation providers to share resources, address service delivery and avoid service duplication.
- Participated in Breastfeeding Promotion Coalition of Stanislaus County and assisted in developing funding request for provider education and breastfeeding promotion countywide.
- 2,041 pregnant women were identified and referred to services, through door-to-door outreach and health fairs by Public Health staff for insurance, prenatal care, case management, behavioral health services, childcare, basic needs and infant services.

Board Priority: EFFICIENT DELIVERY OF PUBLIC SERVICES

A computerized charting system has been implemented that will be instrumental in the case management component to allow the PHD to document and track program outcomes. It will in time assist with staff efficiency in documenting work (see Chapter XVI for the Atlas System).

The intensive case management and support groups provide efficient services to residents within communities and provide financial profits to the health care system.

- Research has shown that home visitation can positively impact birth outcomes[11] and on average returns $2.24 for each dollar invested and is cost effective.[12]

Since the program's inception in January 2004 to December 31, 2006 **Intensive case management services** of high-risk pregnant women has resulted in:

- 244 total births to case managed women with 253 infants delivered (9 sets of twins)
- 222 term births at 37 weeks or greater, or 91%
- 229 infants born at adequate weights of 5.5 pounds or greater
- 116 mothers of 228 or 51% are initiating breastfeeding and currently 35% of the mothers are continuing for 6 months or more
- At age 12 months 90% of the infants have a regular medical provider and health insurance and 77% are currently up to date with their well child checks and immunizations

Potential Savings: 222 term infants X $51,600[13]= 11.4 million dollars

Other impacts

- 230 pregnant women and teens from Public Safety Center and Juvenile Hall referred for public health nursing (PHN) services.
- Of these, 97 women and teens referred from incarceration sites or 42%, accepted PHN services
- 47 births to this population of which 40 or 41%, were at 37 weeks or greater
- 19 of these women (40%) breastfed their infants
- 21 referred and obtained substance abuse counseling, parenting classes, and/or anger management classes
- 13 completed services
- 35 currently open to PHN services
- 74 or 32% admitted to having substance use problem

Community Support Group Impact from January 2004 through December 31, 2006

- There were 266 Births, 270 infants (4 sets of twins)
- 252 term births born at 37 weeks or greater
- 248 infants born at adequate weights of 5.5 pounds or greater

Potential Savings: 252 term infants X $51,600[8]= 13 million dollars

Other results

- 661 Support Group sessions have taken place within all six sites, with over 5,370 contacts
- 48 Support Group participants completed an end of year 2004-2005 Evaluation:
    - 96% of the participants rated the support group as very good to excellent
    - 94% rated the information received in the support group as very good to excellent
    - 77% of the participants stated they had made lifestyle changes based on what they had learned in the support group
- 85 Support Group participants completed an end of year 2005-2006 Evaluation:
    - 95% of the participants rated the support group as very good to excellent
    - 98% rated the information received in the support group as very good to excellent

    - 82% of the participants stated they had made lifestyle changes based on what they had learned in the support group
- Outreach contacts have surpassed 52,768 through door-to-door-, health fairs, community events and places of gathering. These have been opportunities for linkages

Many factors can be involved in causing women to have inadequate prenatal care, premature births, and low birth weight infants. In reaching and working with these women and their families it has been found they have multiple issues impacting them. Through the relationships staff have established and continue to develop, improvements in the county's infant mortality rates are expected

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[5] California Department of Health Services, Center for Health Statistics, Birth Statistics, Master File and Death Statistics Master File, data provided by the Stanislaus County Health Services Agency, Epidemiology, April 2002.
[6] U.S. Department of Health and Human Services, Healthy People 2010: Maternal, Infant and Child Health, Objective 16, Office of Disease and Health Promotion.
[7] California Department of Health Services, Center for Health Statistics, Birth Statistics Master File and Death Statistics Master File, data provided by the Stanislaus County Health Services Agency, Epidemiology, April 2002.
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[11] Kritzman, H, Olds DL, Henderson CR, Long term effects of home visitation on maternal life course and child abuse and neglect: fifteen year follow-up of a randomized trial. *JAMA* 1997; 278:637-643.
[12] Karoly LA, Kilburn RM, Cannon JS. Early Childhood Interventions Proven Results, Future Promises. The Rand Corporation. Santa Monica, CA 2005.
[13] The IOM study.

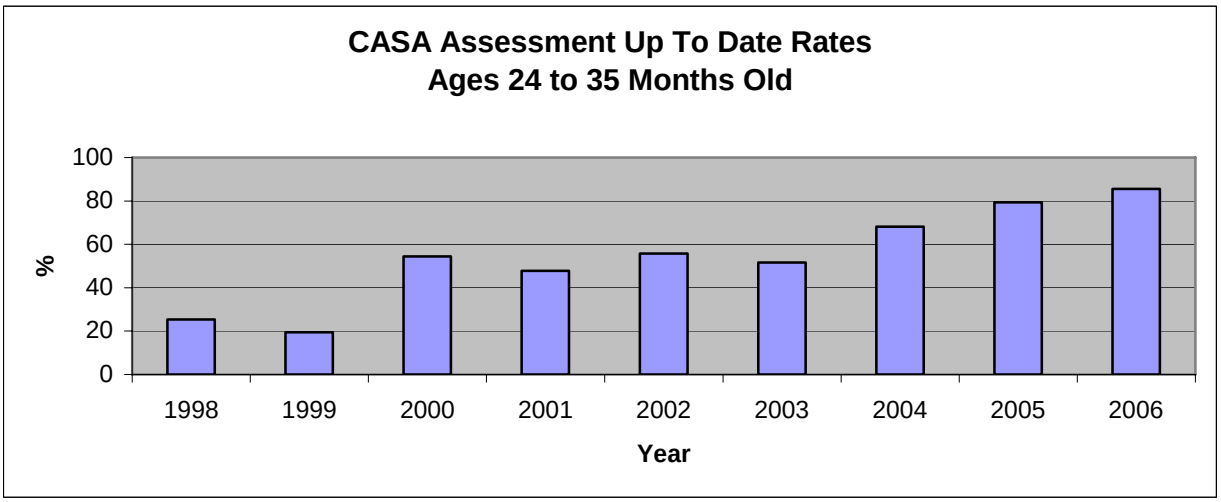
CHAPTER VIII: IMMUNIZATION PROGRAM

With the resurgence of measles in 1989 and 1990, California had 2,014 infants and preschool-age children hospitalized, and 44 died. The Center for Disease Control and the American Academy of Immunization Practices researched why a disease would reappear when there was vaccine to prevent it. Study revealed that only 50% of the children under kindergarten age were properly protected with the required vaccines. Something had to be done to increase this rate as 50% of the two to five year old populations were thus left unprotected. Many parents felt complacent about vaccinating on time and felt the children had plenty of time to complete their shots because the school required immunizations up to date at kindergarten age. However, the "baby shots" are all due before then and to be completed by age 2 years. There are vaccines to prevent 16 diseases, currently all readily available to the residents of Stanislaus County. Public Health has a key role in the prevention of occurrence of these vaccine- preventable communicable diseases. The responsibilities include monitoring immunization rates, assuring vaccine availability, education about vaccine importance and availability, and assurance of the quality of immunization delivery.

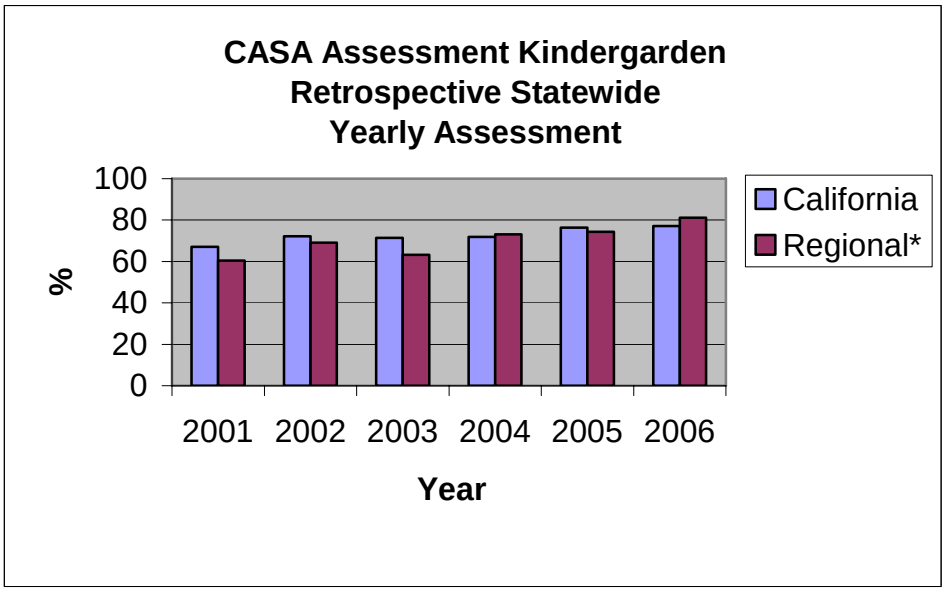
Board Priority: A HEALTHY COMMUNITY

Assuring a healthy community is the primary responsibility of the Immunization program. Every vaccine- preventable disease carries its own story, and the success of the vaccine conquering the incidence of disease is remarkable.

All of these diseases can return with complacency. Stanislaus County has vaccines to prevent 16 diseases. Public Health's job is to prevent these diseases from re-occurring. The primary direct service activity of the PHD is providing immunization clinics. The benchmark, a measurable standard used in health care to determine quality or service, for effective immunization rates is the percentage of 2 year olds who are up-to-date with their immunizations. The 2006 assessment of immunization rates for the Public Health Immunization Clinic showed a rate of 85% of two year olds up to date. Just five years ago it was 48%. The Clinic Assessment Software Application (CASA) results below illustrate the rates of immunizations for ages 24 to 35 months of age.



Another assessment of community immunization rates is the Kindergarten Retrospective Assessment. Staff reviews kindergarten immunization information retrospectively and that information is tabulated and calculated by the State. Stanislaus is combined with Sacramento and San Joaquin Counties. There has been a steady increase in 2-year-old immunizations up to date. This year, this region was higher than the State's average. The State number was: 77% and the local region was 81%. Five years ago this region was at 60%; so much progress has been made over the years.



*** Stanislaus, San Joaquin, Sacramento Counties**

Walk-In Immunization Clinics are held Monday – Friday at the Public Health Division. Community clinics are held at various locations, including school sites and Healthy Start Centers or Resource Centers. Collaborative location immunization clinics are also planned throughout the year.

Board Priority: EFFECTIVE PARTNERSHIPS

Successful immunization records are only achieved through broad collaborative partnerships. The Stanislaus county program relies on its close links with a wide variety of entities that assist in providing locations for immunization clinics, assistance with education and outreach and supplemental funding.

Support for immunization clinics

Stanislaus County locations that have provided a facility for the immunization clinic include: Modesto City Schools, the Office of Education, Head Start and Healthy Start centers and school districts in the following cities: Turlock, Patterson, Waterford, Salida, Oakdale, and Ceres.

The Soroptimist and Venture Clubs provided Public Health with funds that paid for a nurse and vaccination supplies, which supported the Back to School Shots Program. The funds allowed the provision of immunization clinics at various locations to any resident of Stanislaus County, for five years. Examples of community locations include: Fun Works, McHenry Bowl, Food for Less and Orville Wright Community Center. The service club used

their volunteers and paid for prizes and incentives at the clinics. The Soroptimist Club also donated $500 in 2006 to the Area Agency on Aging to offset the cost for the flu shot.

Additionally, Rotary Club of Turlock donated an Immunization Van that is used at various immunization clinics. It is parked in front of the PHD. Rotary Club of Modesto donated $1,000 in 2006 to pay for seniors who were unable to afford the flu shot vaccination fee.

In collaboration with the Area Agency on Aging, Public Health staff provides a flu clinic every year at the Senior Summit event. In addition, other flu clinic locations include: senior nutrition sites, the Salvation Army, Residential Care and Assisted Living facilities, senior mobile home parks, and churches with parish nurses.

Support for education and outreach

All schools with kindergartens and child-care centers provide outreach to their parents. The Office of Education Resource and Referral, physician offices, Community Health Centers, and Golden Valley Health Centers all assisted in the distribution of State supplied immunization materials.

Support of the Baby Track Program was provided by all four Stanislaus County birthing hospitals for many years. They include Emanuel Hospital, Doctors Medical Center, Memorial Medical Center, and Oak Valley Hospital. In addition, Kiwanis Club of Turlock provided Spanish-speaking volunteers to notify mothers in Turlock, and Rotary Club(s) provided promotion of immunizations.

Additional partners include: Modesto City Schools, Dept of Education, California State University of Stanislaus, Modesto Junior College, Second Cup of Coffee, El Concilio, Laura's House, Redwood Family Center, and Juvenile Hall.

A Special Partnership with United Way in 1994 began the Stanislaus County Immunization Coalition. Every year, events are planned and presentations are given to keep the members informed. This will be the 4th year the coalition has provided a Program just for Medical Assistants on "Excellence in Immunization Techniques" (how to give shots properly).

Other activities include events with various partners: Blue Cross, Health Net, Kaiser, Wyeth, MedImmune, Sanofi Pasteur, Galaxo Smith Kline, and Merck Vaccines, Children's Crisis Center, YMCA, Rotary, Kiwanis, WIC, School Nurses, Central California Child Development Services, Head Start, Department of Education, Modesto City Schools, Parent Resource Center and Resource and Referral.

Board Priority: EFFICIENT DELIVERY OF PUBLIC SERVICES

Regional Immunization Data Exchange (RIDE)

The issue of lost or forgotten immunization records often led to over-immunization or under-immunization of children. This concern led to the establishment of regional databases or Immunization Registries to minimize and potentially eliminate this growing concern.

Immunization Registries are confidential, computerized information systems that collect and consolidate vaccination data from multiple health care providers, generate reminder and recall notifications and assess vaccination coverage within a defined geographic area. Stanislaus

County was one of 13 grantees in the state of California to implement an immunization registry in 1996. The first Registry Development Group consisted of several HSA employees, including Dr. Cohen, from the Pediatric Clinic, staff from Gould Medical Group, Pathway Healthcare, Oak Valley Hospital, Granger Medical Clinic and Head Start. In 2000, the software was changed to an internet-based system called Regional Immunization Data Exchange (RIDE) and Stanislaus joined 7 other counties to form a region: Merced, San Joaquin, Tuolumne, Calaveras, Amador, Alpine, and Mariposa. Stanislaus County was the first county in the state to have the most children 0-5 in their registry. This was all made possible with a special grant from Stanislaus County Children and Families Commission (Prop 10). Funds provided data entry assistance to private providers and supplies needed for outreach and education. The County has 275,006 patient records with 2,772,055 immunizations. 61 providers now are partners and there are 290 community locations that use RIDE. Stanislaus County is the only county in California that has reached the 2010 goal of having 95% of the county's 0-5 population in the registry. In March 2007, the PHD was notified that the program has over 96% of the county's 0-5 population in the registry.

RIDE has allowed technology improvements that support efficient government. The public health immunization clinic is working towards having a paperless system this year.

Summary

Immunizations are definitely a cost saving public health intervention to save lives, decrease sickness and promote health. Thus, the immunization program meets the Board of Supervisors priorities of: a safe community, healthy community, effective partnerships and efficient public service.

CHAPTER IX: REFUGEE HEALTH PROGRAM

STANISLAUS COUNTY REFUGEE HEALTH ASSESSMENT PROGRAM (RHAP)

Each year California receives thousands of newly arriving refugees, including asylees, parolees, and victims of trafficking, and hundreds of secondary migrants who are often in need of a wide range of health services. It is important for these individuals to receive culturally sensitive health services in their own language.

In order to be designated a refugee; a person must have a well-founded fear of persecution in their country of origin because of their race, religion, nationality, membership in a particular social group, or political opinion.

Last year 2005-2006, Stanislaus County received 259 refugees. This year the PHD is expecting to double that amount.

FUNDING YEAR	ARRIVALS
1999-2000	278
2000-2001	432
2001-2002	111
2002-2003	127
2003-2004	36
2004-2005	57
2005-2006	259
2006—2007	450 (Anticipated)

The nationalities of refugees arriving in Stanislaus County during 2005/2006:

Columbian:	1	Pakistani:	1
Egyptian:	1	Iranian/Assyrian:	235
Hmong:	9		
Indian:	12		

Quick Facts: Refugees in Stanislaus County:

Each year, the US State Department determines the number of refugees to be allowed entry into the US.

Over 90% of arriving refugees in Stanislaus County are Assyrian.

Assyrian refugees in Stanislaus County are doctors, lawyers, farmers, and business owners. The close-knit society centers on family, church and community.

Over SIX HUNDRED (600) individuals recently attended “Citizenship Classes” sponsored by the Assyrian Civic Club in Turlock.

The refugee population is at high risk for various health problems, because of the enormity of the resettlement process. Refugees face exposure to: starvation, infectious disease, crime,

rape, assault, injuries and maiming, climatic extremes, loss of loved ones including infants and children, and emotional abuse and degradation.

Board Priority: A HEALTHY COMMUNITY

The Goal of the Refugee Health Assessment Program (RHAP) is to ensure that arriving refugees attain an optimum state of health.

Objectives:

- Assure that refugees complete a comprehensive health assessment within 90 calendar days of arrival in Stanislaus County,
- Assure that health issues are identified and interventions initiated; and
- Assure that program requirements are met and goals attained by addressing refugee health care needs in a culturally sensitive and linguistically competent manner.

Funding for the Refugee Health Assessment Program provides each arriving refugee a comprehensive health assessment that includes:

1. Review of current health status
2. Immunizations as needed
3. Tuberculin skin test, and if indicated, chest x-ray and TB management
4. Complete laboratory testing
5. Referrals to local physicians and care providers including mental health
6. A comprehensive physical examination

Through the health assessment, a plethora of adverse health conditions including heart disease, diabetes, TB, and hypertension have been identified. All refugee clients receive referrals to appropriate health providers including primary care, dental, OB/GYN, pediatrician, and Mental Health professionals. (See Appendix H for Refugee Health Stats)

Board Priority: EFFECTIVE PARTNERSHIPS

Refugee Health Assessment Program grantees are encouraged to collaborate with local, regional, statewide, national and/or international agencies/coalitions/groups working with refugees. Staff has developed working collaborative relationships with numerous organizations, including:

VOLUNTARY AGENCIES:
International Rescue Committee (IRC)
World Relief – Modesto
Jewish Family Services – Sacramento

EDUCATION:
Modesto Junior College (ESL Classes)
Turlock Adult School

LOCAL GROUPS AND AGENCIES:
Assyrian American Civic Club of Turlock
The Bridge Community Center

COUNTY SERVICES & PROGRAMS
SC Community Services Agency
HSA CHDP, TB, IMMUNIZATION PROGRAMS

Board Priority: EFFICIENT DELIVERY OF PUBLIC SERVICES

State funding for the Refugee Program has fluctuated from a low of $66,500 for 2005-2006 to a high for 2006-2007 of $135,000. Costs per client have dramatically decreased from a high of $4,838 (estimated) for 2003-2004, to a low of $512 for 2005-2006. These amounts may be misleading since some data are not available for analysis. More accurate costs-per-client may be available for 2006-2007 due to process and oversight changes for this year.

However, it should be noted that the $512 amount does not simply reflect "efficiencies", but rather doing a lot on a shoestring budget. A more realistic cost per client would range somewhere between $1,000 – $1,500. With a more accurate per-client cost in hand, HSA/PHD can then request funding from the State based on that figure and the projected number of refugees arriving in Stanislaus County.

During the 2005-2006-program year, the Refugee Health Assessment Program instituted several changes in procedure:

1. Simplified client tracking from notification date through completion of health assessment to better determine where gaps in service occur, how to manage gaps and (when possible) expand or enhance service

2. Improved fiscal monitoring and oversight resulting in
   a. Identification of problems in Medi-Cal Blue Cross reimbursement.
   b. Readily identified need for additional funding from the state to address anticipated increased caseload.
   c. Better system to determine costs per client.

3. Efficient use of staff to serve refugee clients. The addition of a part time medical assistant who speaks Assyrian and Farsi, frees the bi-lingual Community Health Worker to connect with clients and provide services.

4. Internal processes were streamlined, including:
   a. Intake process that includes lab order, TB testing, and Immunization (IZ) reviews prior to the physical assessment. Previously, all lab, TB and IZ processes were completed AFTER the physical, thus delaying completion. New processes result in the physician having all information on hand at the time of the physical.
   b. Elimination of unnecessary and/or duplicative forms
   c. Reorganization of patient files providing improved oversight of program status.

5. Reduced time allotted for the "patient physical" from one hour to forty minutes (or less, depending upon the clients' current state of health).

CHAPTER X: COMMUNICABLE DISEASE PREVENTION

Board Priority: A HEALTHY COMMUNITY

Communicable disease surveillance and prevention is a crucial activity within Public Health. Appendix J is a trending of reportable communicable diseases within Stanislaus County. Most communicable diseases were stable in prevalence. However, there have been three emerging infections and interventions that warrant presentation within this report.

1. West Nile Virus (WNV)

Background

The Stanislaus County WNV Taskforce was formed in 2003 to prepare for this infection transmitted by mosquitoes. Despite coordinated and collaborative efforts, the county was significantly impacted during 2005 with 92 human cases (including one death) and 42 equine (horse) infections with 18 equine deaths. The intensive 2006 campaign was intended to apply the lessons learned to enhance the protection of humans and horses within our county.

Intensive Spraying

The warm winter and spring flooding on the Westside were a major concern for mosquito breeding. The Mosquito Abatement Districts started spraying at the beginning of March with applications to kill the mosquito larvae followed by spraying during the summer to kill adult mosquitoes. More than 200,000 acres were sprayed in Stanislaus County.

Risk Communication

There was a multimedia campaign to increase public awareness:

- Press Conference and Press Releases. The campaign began in February 2006 with a press conference followed by periodic press releases to keep the public fully informed regarding significant developments.
- Television Public Service Announcement (PSA). The county Public Information Officer collaborated with the Abatement Districts to develop a 30 second PSA that was aired on cable channels during the summer. This PSA received a national award.
- Prevention Checklist. A new aid for county residents was developed in English and Spanish to assist with locating sources of mosquito breeding on their property and around their homes. Thirty thousand brochures were produced and widely distributed.
- Geographic Information System (GIS) Mapping. These maps localized the positive mosquito pools, positive birds, and affected horses. The maps were posted on the Health Services Agency website (www.hsahealth.org) and a new website (www.stanemergency.com).

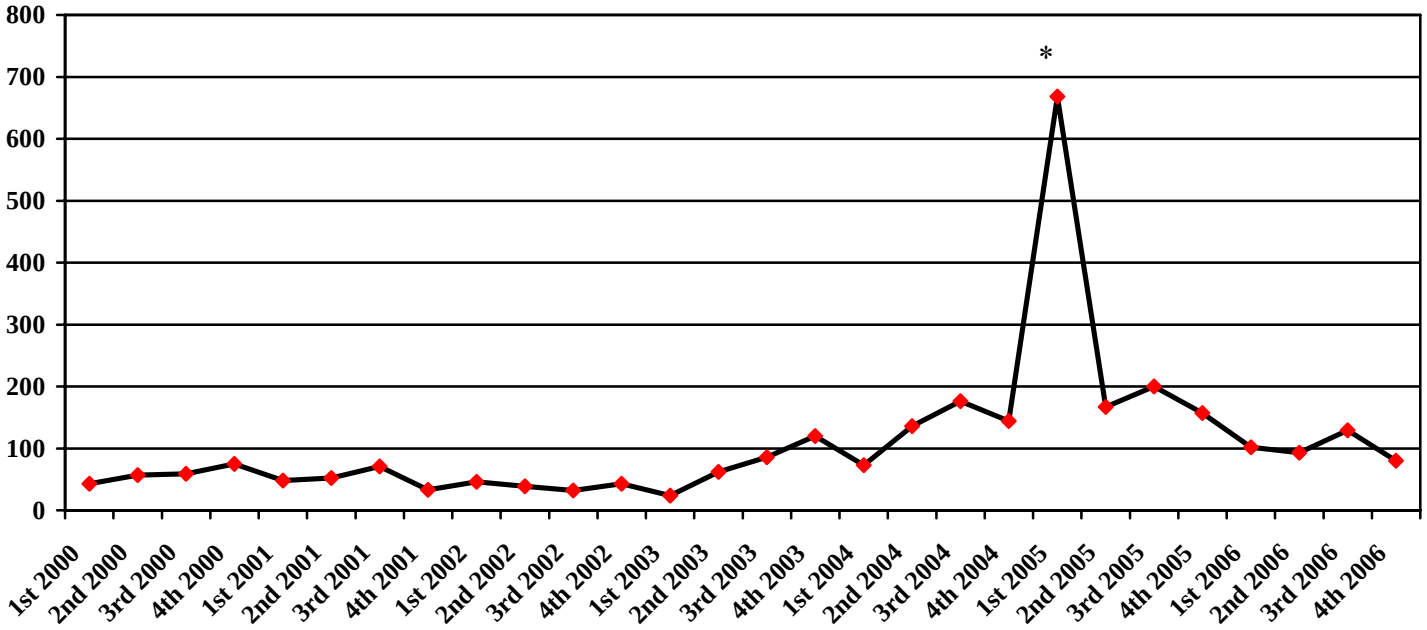
Decreased Number of Infections in 2006

During 2006 there was a dramatic decrease in the number of affected persons and horses. There were 12 human cases (compared to 92 the prior year) and no deaths. However, there were a higher proportion of cases in children and women. Therefore, the 2007 risk communication plan campaign will focus on these two risk groups with special emphasis on distribution of materials within the school system.

2. Gonorrhea

The incidence of gonorrhea was fairly stable until 2003. The increase in Stanislaus County was part of a seven-county regional outbreak.

Reported Cases



Year by Quarter

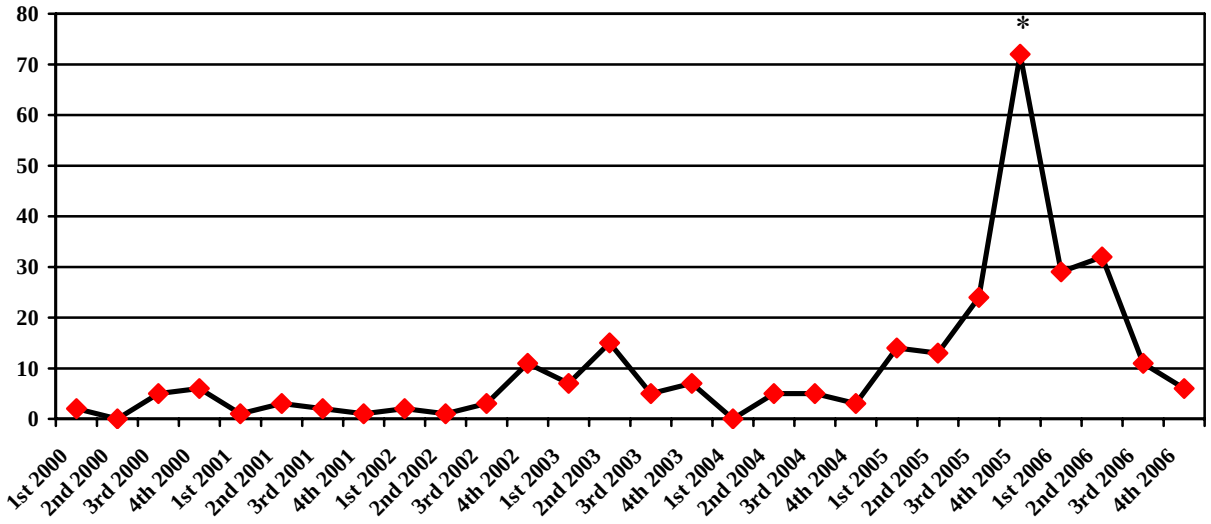
* BOS approved PH STD clinic

During 2005 the Board of Supervisors approved the reestablishment of the STD (sexually transmitted diseases) Clinic at Public Health with a resulting improvement in gonorrhea cases by quarter. This continues to be an intensive focus for the staff and in January 2007 Stanislaus joined a collaborative called Enhanced Gonorrhea Surveillance with intensive interview of affected persons. Despite the improvements in gonorrhea incidence, there has been no improvement in Chlamydia prevalence.

3. Pertussis (whooping cough)

Pertussis (whooping cough) is considered an illness of children. However, there has been a local and national trend of increasing cases among adolescents and adults.

Reported Cases



Year by Quarter

* Introduction of new vaccine for adolescents and adults

The graph above demonstrates a dramatic increase within the county during 2004 and 2005. Cases ranged in age from 3 weeks old to 65 years old. A new vaccine became available in 2005 for adolescents and adults. This vaccine greatly assisted the epidemic intervention. In addition, the aggressive contact investigation by communicable disease nurses had a significant impact on mitigating this epidemic. (NOTE: Epidemic intervention requires antibiotic prophylaxis for exposed persons.)

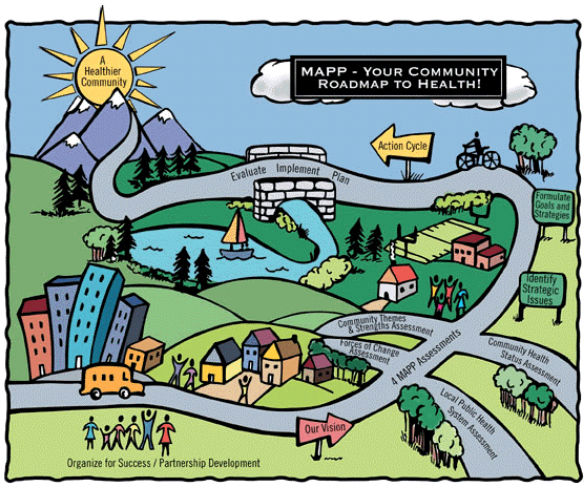
See Appendix I – WNV Task Force GIS Maps with Positive Birds, Mosquito Samples and Equine WNV Cases

See Appendix J – Communicable Disease Trend Summary, 2000-2006

SECTION III: EFFECTIVE PARTNERSHIPS

CHAPTER XI: MOBILIZING FOR ACTION THROUGH PLANNING & PARTNERSHIP

In 2002, Cle Moore, HSA Public Health Director, had the foresight to encourage Stanislaus County Public Health's implementation of Mobilizing for Action through Planning and Partnership (MAPP), a strategic approach to community health improvement. This tool helps communities improve health and quality of life through community-wide strategic planning. Using MAPP, communities seek to achieve optimal health by identifying and using their resources wisely, taking into account their unique circumstances and needs, and forming effective partnerships for strategic action. The National Association of County and City Health Officials- (NACCHO) developed the MAPP tool, in cooperation with the Public Health Practice Program Office, Centers for Disease Control and Prevention (CDC).



Board Priority: EFFECTIVE PARTNERSHIPS

The Initial phase of MAPP was Organizing for Success and Partnership Development. This phase allowed Public Health to plan a process that built commitment, engaged participants, and ultimately built a strong foundation that facilitated a successful implementation. Because community-wide health improvement planning requires a high level of commitment from partners, stakeholders, and the community residents who are recruited to participate, it was critical that Public Health engage partners that were committed and well established. Because the MAPP process was not a funded initiative, it would prove challenging to complete some of the phases throughout the process.

Fortunately, the Partnership for the Public's Health initiative, HSA's funded grant from the Public Health Institute and the California Endowment proved to be the critical bridge in overcoming some of the financial and resource needs of the MAPP process. The three initial partners were Airport Neighbors United, Ceres Partnership for Healthy Children, and West Modesto King Kennedy Neighborhood Collaborative. A shared vision was established that would provide common values and a framework for pursuing long-range community goals. This vision served and continues to serve as a focal point for the ultimate goal: A Healthier Stanislaus:

Working together as partners, sharing talents and skills and engaging the community to promote lasting change to create a safe nurturing, and healthy environment. Striving to create recreational, educational, and economic opportunities for children and their families.

The next major activity of MAPP was the bringing together of four assessments to drive the development of the community strategic plan. The four assessments would in essence provide the data in which to identify Public Health priorities/concerns to focus on.

- ***The Community Themes and Strengths Assessment*** identifies themes that interest and engage the community, perceptions about quality of life, and community assets.
- ***The Local Public Health System Assessment*** measures the capacity of the local health system to conduct essential public health services.
- ***The Community Health Status Assessment*** analyzes data about health status, quality of life and risk factors in the community.
- ***The Forces of Change Assessment*** identifies forces that are occurring or will occur that will affect the community or the local health system.

The Community Health Assessment (CHA) involves the most planning and was the most time intensive. Because this was to give a snapshot of all communities, there was a need to involve and engage several entities that had an interest in assessing the county and the communities within. In 2002, a CHA Task Force was formed to provide guidance, recommendations, and meet periodically for planning and implementation of the assessment. The Task Force included representatives from the following:

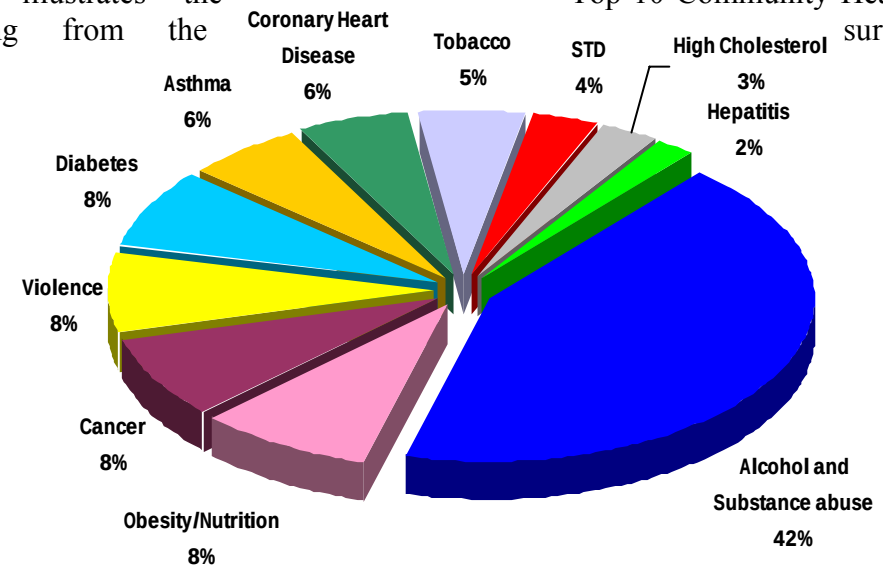
Airport Neighbors United
Ceres Partnership for Healthy Children
California State University at Stanislaus
Grayson-Westley Healthy Start
Hughson Healthy Start
Keyes Elementary School
Memorial Medical Center
Migrant Education, Region 3
Newman-Crows Landing Healthy Start
Oakdale-Riverbank Family Resource Center
Oakdale Family Support Network
Peterson Alternative Center for Education (PACE) Healthy Start
Riverbank Healthy Start
Robertson Road Healthy Start
Stanislaus County Children's Council
Stanislaus County Behavioral Health & Recovery Services: Job Club
Teen Life Challenge
WAKEFIELD HEALTHY START
West Modesto King Kennedy Neighborhood Collaborative
Health Services Agency:

- Keep Baby Safe Program
- REAL Program
- Community Health Services
- Immunization Program
- STD/HIV Program
- Women, Infants, and Children (WIC) Program
- Ceres Medical Office
- Family Practice Center
- Hughson Medical Office
- McHenry Medical Office
- Paradise Medical Office

In addition, membership organizations such as Kaiser, Memorial Medical Center, Blue Cross and Emmanuel Medical Center provided approximately $15,000 for the CHA. Ultimately the CHA was divided into Phase one and Phase two. CHA: Phase I consisted of secondary data utilized to paint a complete and comprehensive picture of the total health of the county as related to over twenty different health indicators. CHA: Phase II was to be the countywide survey that was to be developed with input from the taskforce. In addition to the taskforce, HSA/PHD implemented a Public Health Issues Strategic Planning Team that met every Monday for project update and monitoring of public health concerns.

CHA: Phase I was published as ***Unleashing the Power: Unity, Oneness, and Partnerships.*** This publication was distributed to partners, organizations within county, and posted on the HSA website. In addition, HSA staff conducted a "presentation road show" taking all the data to various communities and venues throughout the county to ensure that it was accessible to all. This continues to be a valuable document to agencies/organizations seeking county specific data.

CHA: Phase II was needed to fill in the data gaps that were not available through secondary data sources. The formation of the taskforce proved to be the critical point in developing the survey instruments and the outreach effort to gather sufficient sample size to be statistically significant. The result was the development of three survey instruments; adult, adolescent and child and the participation of over twelve (12) agencies that conducted survey outreach. To ensure consistent survey validity, a survey-training curriculum was oriented to over 119 different individuals, 84 of which actively performed survey outreach. It took approximately eight (8) months to achieve the sample size needed, resulting in over 3,800 completed surveys collected. Throughout 2004 and early 2005, the HSA Epidemiology team analyzed and weighted the surveys to accurately reflect a statistically sound data. The 2005 Community Health Report focused on the analyzed survey results from the CHA: Phase II and the critical identification of the top 10 health concerns in the county. In addition to a comprehensive countywide picture, the surveys collected contained zip codes that identified region specific health concerns and behavioral risk factors. Communities were encouraged to host and convene a community forum where their region specific results could be presented and discussed. The pie chart below illustrates the Top 10 Community Health Concerns resulting from the surveys.



In 2003, the Local Public Health System Assessment proved to be a major undertaking as it was an attempt to measure the capacity of the local health system to conduct essential public health services. It was an enormous opportunity to engage those usually considered as non-traditional public health partners and educate them on their role in providing and fulfilling public health responsibilities. The understanding of the public health system and the communication of each partner's role will ultimately lead to minimization of duplicated services.

This assessment entailed the use of the National Public Health Performance Standards Assessment Instrument. Representatives from each sector were invited to take part in one of three meetings to collectively complete the assessment. A total of sixty-nine (69) completed assessments were collected from over 50 organizations. The surveys were analyzed by Center for Disease Control, which provided a report ranking the Public Health System's strengths and weaknesses in providing the ten Essential Public Health Services (See Appendix K). The ranking demonstrated that the PH system and the PHD were strongest in diagnosing, enforcing and informing and weakest in evaluation, assuring competency and research.

By mid 2005, all the assessments were complete. The next step was to move forward in identifying the Strategic Issues. This had to be done on a larger scale. It required the pulling together of all the assessment data and incorporating recent county specific data on mortality and morbidity. It was equally important to determine what assets and venues were already in place to use existing partnerships and coalitions efficiently.

After several months of planning, on February 9, 2006, a monumental event occurred that would change the way Public Health engaged stakeholders-- *"Leading the Way to a Healthier Stanislaus, a Workshop for Key Stakeholders"*. Approximately 120 representatives from over forty different agencies came together to formulate strategies and activities for two priority areas:

1. Prevention of chronic diseases to include diabetes, heart disease and obesity
2. Prevention of substance abuse and promotion of safe and walkable communities

The participation and dynamics of that working meeting were extraordinary. It exceeded the expectations of what HSA had set out to accomplish. Not only did staff gather the input, opinions, and recommendations of multidisciplinary partners, an understanding and a mutual respect for each other's roles in the Public Health System were created. It was one of the post powerful events Public Health has convened. HSA received overwhelming feedback on the level of inspiration and motivation to continue working towards a healthier Stanislaus.

After the workshop, all the brainstorming was gathered and organized into common themes. There was a need to convene two additional workshops to refine the strategies and identify the assets within each participating agency. Those workshops were also well attended with over fifty (50+) partners in attendance. These workshops proved to attract even more new partners to the table. The list of the agencies that sent from one to multiple representatives to at least one of the five MAPP workshops is in the PARTNERSHIPS section.

Board Priorities: A SAFE COMMUNITY AND A HEALTHY COMMUNITY

Ultimately, existing coalitions/leads were identified and assigned to serve as MAPP subcommittee leads for one of the three specific MAPP objectives. This approach was built on the fact that these leads were already working on efforts that related to the assigned objective. It would just require the addition of interested partners recruited through the MAPP process.

- **Healthy Eating Active Living- *WMKKNC***
  - Prevention of Obesity, Diabetes, Heart disease
  - Promote Nutrition and Physical Activity
- **Neighborhood Safety-*Safe Communities Coalition***
  - Create Safe and Walkable communities
  - Violence Prevention

    - Infant and Child Passenger Safety
    - Seatbelt Use
- **Prevention of Substance Abuse – *Behavioral Health and Recovery Services***
    - Resource availability
    - Prevention and Education
    - Treatment and Support

Each subcommittee has adapted the strategies and resource lists created throughout the MAPP workshops. All three subcommittees have begun the strategic planning process and are in the implementation stage. There is no timeline associated with this plan. It is a continuous process that has already resulted in more effective and efficient partnerships.

Board Priority: EFFICIENT DELIVERY OF PUBLIC SERVICES

The benefits of the MAPP process are endless. Many Stanislaus County Board priorities are addressed through MAPP; A safe community, healthy community, effective partnerships and efficient delivery of Public Heath Services. All this has been done with minimal funding but with an overwhelming commitment to a Healthier Stanislaus.

In summary, strategic planning assists communities in more effectively securing resources, matching needs with assets, responding to external circumstances, anticipating and managing change, and establishing a long-range direction for the community. The MAPP model includes basic strategic planning concepts, such as visioning, an environmental scan, the identification of strategic issues, and the formulation of strategies. It engages the community and creates community ownership for public health issues. Through community participation in the MAPP process, residents may gain a better awareness of the area in which they live and their own potential for improving their quality of life. Community-driven processes also lead to collective thinking and a sense of community ownership in initiatives, and, ultimately, may produce more innovative, effective, and sustainable solutions to complex problems. Community participation in the MAPP process may augment community involvement in other initiatives and / or have long-lasting effects on creating a stronger community spirit.

MAPP focuses on the creation and strengthening of the local public health system. Local health systems are the human, informational, financial and organizational resources, including public, private and voluntary organizations and individuals that contribute to the public's health. This focus is important because the public's health depends on the interaction of many factors; thus, the health of a community is a shared responsibility of many entities and organizations, in the community. The MAPP process brings these diverse interests together to collaboratively determine the most effective way to conduct public health activities. Although the process has taken time and much hard work, Stanislaus County as a whole will benefit from all the MAPP activities. With the tireless support of the Health Services Agency Senior Managers and the Public Health Issues Staff, this initiative continues to move forward at full speed. As mentioned, the MAPP Process has already surpassed all initial expectations. The PHD anticipates continued successes toward achieving the goal of a Healthier Stanislaus County.

The following examples are illustrative of the Public Health System Partners:

Emergency Preparedness Committee

- American Medical Response
- California Department of Health Services, Emergency Preparedness Office
- Community Hospice
- Doctors Medical Center
- Emanuel Medical Center
- Evergreen Healthcare
- E.J. Gallo Winery
- Golden Valley Health Centers
- Health Services Agency
- Kaiser Permanente
- Kindred Hospital
- Memorial Medical Center
- Modesto Fire Department
- Mountain Valley EMS Agency
- Oak Valley Hospital
- Stanislaus County Office of Emergency Services
- Region IV EMS Office
- Stanislaus Surgical Hospital

HEART Coalition

- Health Net
- Sutter Gould Medical Foundation
- Modesto Junior College
- Blue Cross
- West Modesto King Kennedy Neighborhood Collaborative
- Emanuel Medical Center
- American Heart Association
- Response Link
- Doctors Medical Center
- Modesto City Schools
- Valley Heart Associates
- Stanislaus Cardiology
- Kaiser Permanente
- Kindred Hospital
- Health Services Agency
- HSA Foundation
- Doctors Medical Center Foundation
- Memorial Hospital Association
- American Diabetes Association

Safe Communities Coalition

- Health Services Agency
- Newman Family Resource Center
- Turlock Family Resource Center
- Modesto City Schools
- Ceres Partnership for Healthy Children
- Airport Neighbors United
- West Modesto King Kennedy Neighborhood Collaborative
- Modesto Police Department
- Memorial Medical Center
- Family Support Network
- County Public Works
- City of Modesto
- California Highway Patrol
- Save Mart Supermarkets
- Center for Human Services

Teen Pregnancy Education Team

- Modesto High School
- Johansen High School
- Downey High School
- Beyer High School
- Davis High School
- Elliott Alternative Education Center
- Patterson High School
- Roosevelt Junior High School
- Hanshaw Middle School
- La Loma Junior High School
- Mark Twain Junior High School
- Blaker Kinser Junior High School
- Stanislaus County Juvenile Hall
- John B. Allard High School
- Del Puerto High School
- West Side Valley High School
- Argus High School
- Modesto City Schools Healthy Start Sites
- Riverbank Healthy Start
- King Kennedy Memorial Community Center
- Turlock Family Network

Stanislaus County RIDE Registry Partners

- Aspen Family Medical Clinic
- Big Valley Christian School
- Blue Cross Health Plan
- California State University-Stanislaus
- Carlson, Hansen & Kwon-Hong MD's
- Cedar Family Practice
- Central California Child Development Services
- Ceres Medical Office
- Ceres Unified School District
- Community Health Services
- Del Puerto Health Center
- Denair Unified School District
- Doctors Medical Center
- Family Healthcare Medical Group
- Family Medical Group
- Family Practice Center
- Empire Union School District
- Golden Valley Health Centers
- Gratton School District
- Health Net
- Hickman School District
- Hughson Unified School District
- Sudjai Itsara MD
- Juvenile Hall
- Kaiser Permanente
- David Kerwin MD
- Knight's Ferry School District
- Binh Le MD
- Memorial Medical Center
- McHenry Medical Office
- Modesto City School District
- Modesto Junior College
- Modesto Pediatrics
- Modesto Primary Care
- Newman/Crowslanding Unified School District
- Oakdale Joint Unified School District
- Oak Valley Hospital
- Paradise Medical Office
- Parent Resource Center
- Pathway Health Care
- Pediatrics Clinic
- Preferred Medical Plan
- Public Health Services
- Meetinder & Nirmal Rai MD
- Richard Moon Elementary School
- Riverbank Unified School District
- Salida Union School District
- Samakhom Medical Clinic
- Sierra Health Center
- Sierra Vista Child & Family Services
- Rafael Soria MD
- Stanislaus Behavioral Health Center
- Stanislaus County Head Start
- Stanislaus Family Child Care Association
- Stanislaus Office of Education
- Stanislaus Union School District
- Sutter Gould Medical Foundation
- Sylvan Union School District
- Turlock Medical Office
- Turlock Pediatrics
- Turlock Unified School District
- Valley Oak Pediatrics Association
- Waterford High School
- Waterford Middle School
- Robert Watson III MD
- Mark Winkler MD
- Wise Choice Home Day Care
- Maged Yacoub MD

Stanislaus County West Nile Virus Taskforce

- Agricultural Commissioner's Office
- Animal Services
- Area Agency on Aging/Veterans Services
- California Department of Food and, Agriculture
- CDHS, Vector-Borne Disease Section
- Delta Blood Bank
- East Side Mosquito Abatement District
- Environmental Resources
- Health Services Agency
- Office of Emergency Services
- Stanislaus Wildlife Care Center
- Strategic Business Technology
- Turlock Mosquito Abatement District

Stanislaus County Communicable Disease Taskforce

- Doctors Medical Center
- Emanuel Medical Center
- Golden Valley Health Centers
- Health Services Agency
- Jail Medical Unit (CFMG)
- Kaiser Permanente
- Kindred Healthcare
- Memorial Medical Center
- Modesto City Schools
- Office of Education
- Stanislaus Surgical Hospital

Mobilizing for Action through Planning and Partnership (MAPP)

- Area Agency on Aging
- Memorial Medical Center
- Blue Cross
- Sutter Gould
- Oak Valley Hospital
- Kaiser Permanente
- Golden Valley health Center
- Del Puerto Hospital District
- Health Net
- West Modesto King Kennedy Neighborhood Collaborative
- Airport Neighbors United
- Ceres Partnership for Healthy Children
- Riverbank Casa del Rio
- Oakdale Family Support Network
- Doctor's Medical Center
- Grayson Family Resource Center
- Hughson Family Resource Center
- Newman Family Resource Center
- Turlock Family Resource Center
- Modesto Bee
- Doctor's Medical Center Foundation
- Center for Human Services
- United Way
- California Highway Patrol
- Modesto Police Department
- Ceres Police Department
- Vine House
- Medical Ambassadors
- Valley Heart Association
- Youth for Christ
- Modesto City Council
- Christ Unity Baptist Church
- Christian Love
- Central Baptist Church
- Save Mart
- Franklin Healthy Start
- Mark Twain Healthy Start
- Congregations Building Communities
- Modesto City Schools
- Modesto Parks and Recreation
- MAX Transportation
- Have Women's Center
- First Step
- El Concilio
- HICAP
- Policy Institute
- Arbor Career Center
- California State University- Stanislaus
- Families in Partnership
- Community Diabetes Education Services
- Stanislaus County:
    - Health Services Agency
    - Board of Supervisors
    - Office of Education
    - Community Services Agency
    - Office of Emergency services
    - Chief Executive Office
    - Library System
    - Animal Services
    - Children and Families Commission
    - Behavioral Health and Recovery Services
    - Sheriff's Department
    - Probation
    - Weed and Seed
    - Public Works
    - Migrant Health
    - Maternal Child and Adolescent Health
    - Child Protective Services

Vital Records-Electronic Death Registration System (EDRS)

- Allen Mortuary
- Deegan Funeral Chapel
- Evergreen Memorial Park
- Evins Funeral Home
- Eaton Family
- Franklin & Downs Funeral Home
- Fry Family Chapel
- P L Fry Memorial
- Hillview Funeral Chapel
- Ivers & Alcorn Funeral Home
- Lakewood Funeral Home
- Neptune Society- Modesto
- Neptune Society- Stockton
- Oakdale-Riverbank Memorial Chapel
- Salas Brothers Funeral Chapel
- Turlock Funeral Home
- Whitehurst Funeral Chapel
- Whitehurst Norton & Dias Chapel
- Stanislaus County Coroner's Office

Maternal, Child, Adolescent Health (MCAH) Advisory Committee

- Planned Parenthood
- Health Services Agency
- Kaiser Permanente
- HSA Community Health Services
- March of Dimes
- Maternal Child and Adolescent Health
- Public Health
- Stanislaus County Children's Council
- Blue Cross of California
- Planned Parenthood Mar Monte
- Golden Valley Health Services
- Stanislaus County Office of Education
- Leaps and Bounds
- Health Net
- Modesto City Schools

West Modesto King Kennedy Neighborhood Collaborative Healthy Eating Active Living Community Health Initiative

- Kaiser Permanente
- Blue Cross of California State Sponsored Programs
- Behavioral Health & Recovery Services
- Breastfeeding Coalition
- Children and Families Commission
- Christ Unity Baptist Church
- Christian Love Baptist Church
- City of Modesto Parks, Recreation and Neighborhoods Department
- Clendenin Bird & Company
- Community Services Agency
- Doctor Medical Foundation
- El Concilio
- Franklin Healthy Start
- Golden Valley Health Centers
- Health Net
- Health Services Agency
- Healthy Aging Association
- Heart Coalition
- Hispanic Chamber of Commerce
- Hispanic Leadership Council
- HomeTown Buffet
- Mayor Jim Ridenou
- Modesto City Schools
- Franklin Healthy Start
- Intervention Programs
- Mark Twain Healthy Start
- Nutrition Services
- Modesto Convention & Visitors Bureau
- Modesto Irrigation District
- Modesto Police Department
- My Chef
- Nutrition Network
- Paper Moon Restaurant
- Safe Communities Coalition
- Save Mart Supermarkets
- Senator Dave Cogdill
- Sierra Vista
- Sutter Gould Medical Center
- Supervisor Jeff Grover
- The Bridge
- The Center for Human Services
- The First Tee
- United Way of Stanislaus County
- Weed and Seed
- Women Infant and Children

Teen Pregnancy Prevention/Parenting Network

- Del Puerto High School
- Argus High School
- WIC Program
- Parent Resource Center
- Women's Health Center
- Girl Scouts of America
- DMC Foundation
- Center for Human Services
- Ceres Unified School District
- Memorial Hospital- Labor and Delivery
- Modesto City Schools
- Turlock Medical Office
- Cal Learn- Department of Social Services
- Stanislaus County Office of Education
- Modesto Junior College- West
- Medical Arts Building
- Bethany Christian Service
- Johansen High School
- Riverbank High School
- Employment Development Department
- Community Health Services
- Planned Parenthood
- Behavioral Health & Recovery Services- Safe and Healthy Futures
- Employment Development Department – Job Corps
- Modesto City Schools- Child Development
- Workforce Training Center
- Tobacco Education Program
- Project Redirect- YMCA
- P.A.C.E.
- Stanislaus County Housing Authority
- Stanislaus County Community School
- John Allard Community School
- Hughson Medical Office
- West Modesto King Kennedy Neighborhood Collaborative
- Healthy Start- Hanshaw Middle School
- District Attorney's Office
- Emmanuel Medical Center- Maternal Child Education
- Westside Community Alliance
- Healthy Start- Downey High School
- Healthy Start- Mark Twain Jr. High School
- Roselawn High School
- REAL Project
- Ceres Partnership for Healthy Children
- Americorps- Workforce Training Center- MJC
- Oakdale Prenatal Clinic
- MJC GED Testing Site
- Probation Department
- Healthy Start
- Oak Valley Hospital- Family Support Network
- Ceres Medical Office
- YMCA Teen Program
- Public Health Department
- Vocational Education- Modesto City Schools
- Project LEAD- Stanislaus County Office of Education
- Ceres Healthy Start- Blaker-Kinsor Jr. High School
- Adolescent Treatment Program- Stanislaus Recovery Center
- Turlock School District
- Modesto Junior College- Student Development
- HSA Community Health Services
- Stanislaus County Children's Council
- Family Preservation- Community Services Agency
- Blue Cross of California
- McHenry Medical Office
- Youth For Christ/Mentor Moms
- East Stanislaus High School
- Valley Business High School
- Turlock Family Network
- City of Oakdale
- Modesto High School
- Women's Haven
- Healthy Start- Westside Valley High School
- Teen Parent Center- Downey High School
- Behavioral Health and Recovery Services Department
- Central Valley Opportunity Center
- Teen Parent Center- Elliott Education Center
- Up With Moms- Turlock Covenant Church
- Department of Employment and Training

Asthma Coalition

- Oakdale Unified School District
- Golden Valley Health Centers
- Allergy One
- Child Health and Disability Prevention (CHDP) Program
- Maric College
- Newman/Crosslanding School District
- Health Net
- Patterson Unified School District
- Kaiser Permanente
- Health Services Agency
- Maternal Child and Adolescent Health (MCAH) program
- Public Health Services
- Central California Child Development Services
- Sutter Health Medical
- Stanislaus Office of Education
- Blue Cross of California
- West Modesto King Kennedy Neighborhood Collaborative
- American Lung Association- San Joaquin
- Ceres Partnership for Healthy Children
- Stanislaus County Tobacco Education Program
- Astra-Zeneca Pharmaceuticals
- Merced County Public Health Department
- HSA Foundation
- Riverbank Community Health Clinic
- Airport Neighbors Untied (ANU)
- Regional Asthma Management and Prevention
- Apria Health Care
- Modesto City Schools
- California Children's Services
- Medic Alert
- GlaxoSmithKiline Vaccines
- Health Plan of San Joaquin
- Childhood Lead Poisoning Prevention Program
- Turlock Unified School District
- Merced/Mariposa County Asthma Coalition
- Catherine Everett School
- Stanislaus CARES project
- San Joaquin Valley Air Pollution Control District
- Riverbank School District
- American Lung Association Central California
- Newman Healthy Start Family Resource Center
- Westley/Grayson Family Resource Center
- Stanislaus County Children and Families Commission
- Alcon Labs
- American Lung Association Sacramento
- Valley Oak Pediatrics
- Doctors Medical Center Foundation
- Merced Migrant Education

Breastfeeding Coalition

- HSA Community Health Services
- Parent Resource Center
- Department of Health Services- WIC Branch
- California Children's Services
- University of California Cooperative Extension
- Health Services Agency- WIC Program
- Golden Valley Health Centers
- Blue Cross of California
- Sutter Gould Medical Foundation Pediatrics
- Private Practice, Pediatrics
- Doctors Medical Center
- La Leche League Leaders
- Babies "R" Us

SECTION IV: EFFICIENT DELIVERY OF PUBLIC SERVICES

CHAPTER XII: CALIFORNIA CHILDREN SERVICES (CCS)

CCS is a statewide program that treats children with certain physical limitations and chronic health diseases. Stanislaus County is responsible for operating the local CCS program. Funding for the local program comes from state, county and federal sources. The program is caseload driven.

It is expected that the number of children needing CCS services would increase in the county as Stanislaus has a population of 505,505, with 30% under eighteen (18) years of age and births averaging more than 8,000 a year.

The program provides the following benefits for any child who is determined eligible for the services:

- Treatment including: doctor services, hospital and surgical care, physical and occupational therapy, laboratory tests, x-rays, orthopedic appliances and medical equipment.
- Medical case management to help get specialist physicians and care for the child when medically necessary.
- Medical Therapy Program, which includes physical and occupational therapy.

Children in need should be eligible for one of three funding streams (1) Medi-Cal (2) Healthy Families (HF) or (3) California Children's Services. Both Medi-Cal and Healthy Families require families to apply for coverage, while CCS covers those children without another payer source if they have a CCS eligible condition and have not qualified for either of the insurance plans. CCS cannot deny a claim if families have not applied to either of the available insurances and if the condition and residence of the child meets program qualifications of medical necessity and residence.

The illustrations below depict the enormous growth in the CCS funded caseload from 2002-2003 through 2005-2006. The most significant increase in caseload is between 2004-2005 and 2005-2006. The CCS funded cases have more than doubled within the last two fiscal years.

California Children's Services Caseload Summary

	Medi-Cal	**HF**	**CCS**	**Actual Caseload**
2002-2003	2,423	300	192	2,915
2003-2004	2,594	287	215	3,096
2004-2005	2,631	296	212	3,139
2005-2006	2,811	383	466	3,660
Total	10,459	1,266	1,085	12,810

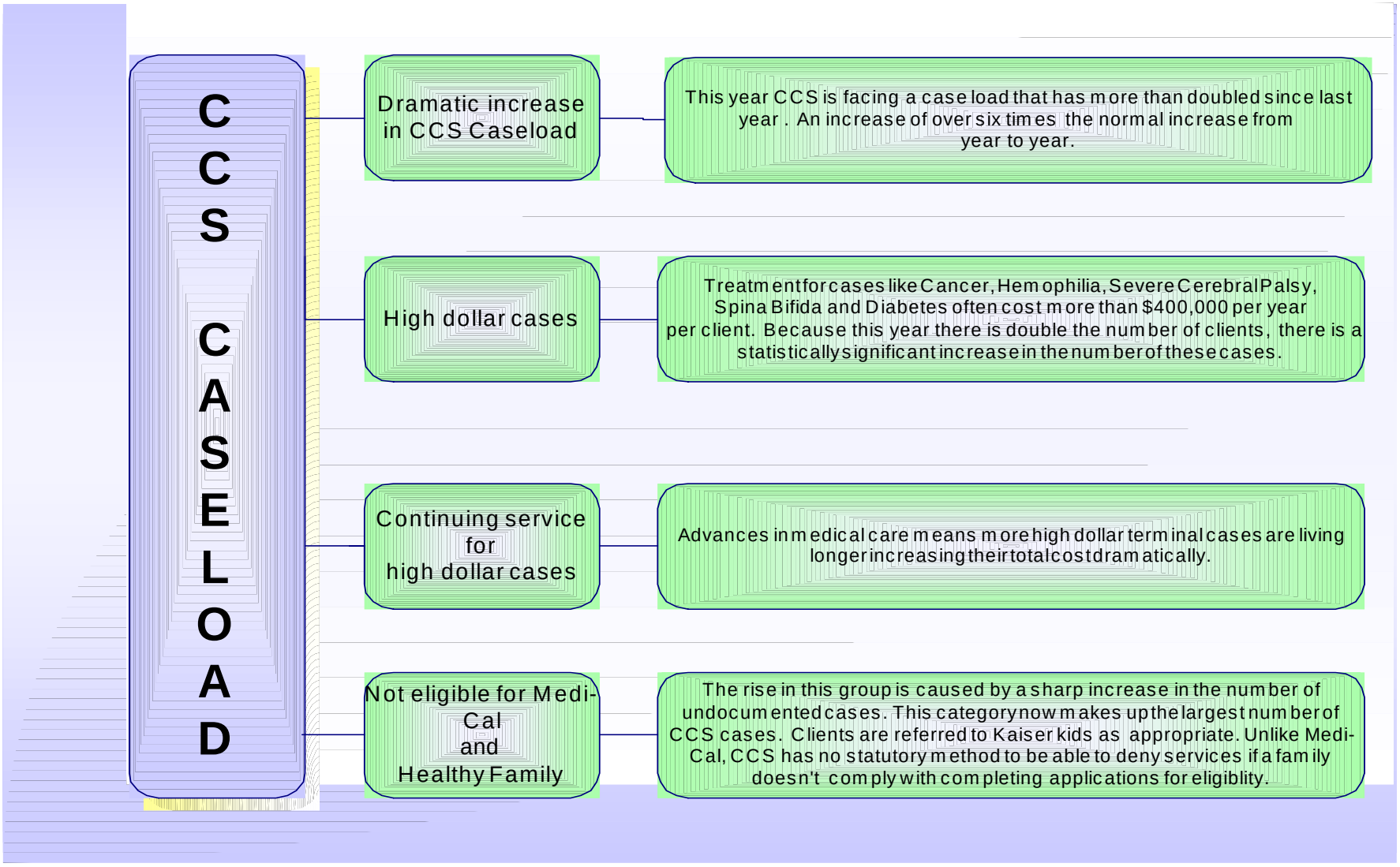
In examining the caseload growth per payer, it is noted that the caseload growth for Medi-Cal eligible has fluctuated from 2,423 in 2002-2003 to 2,811 in 2005-2006. The

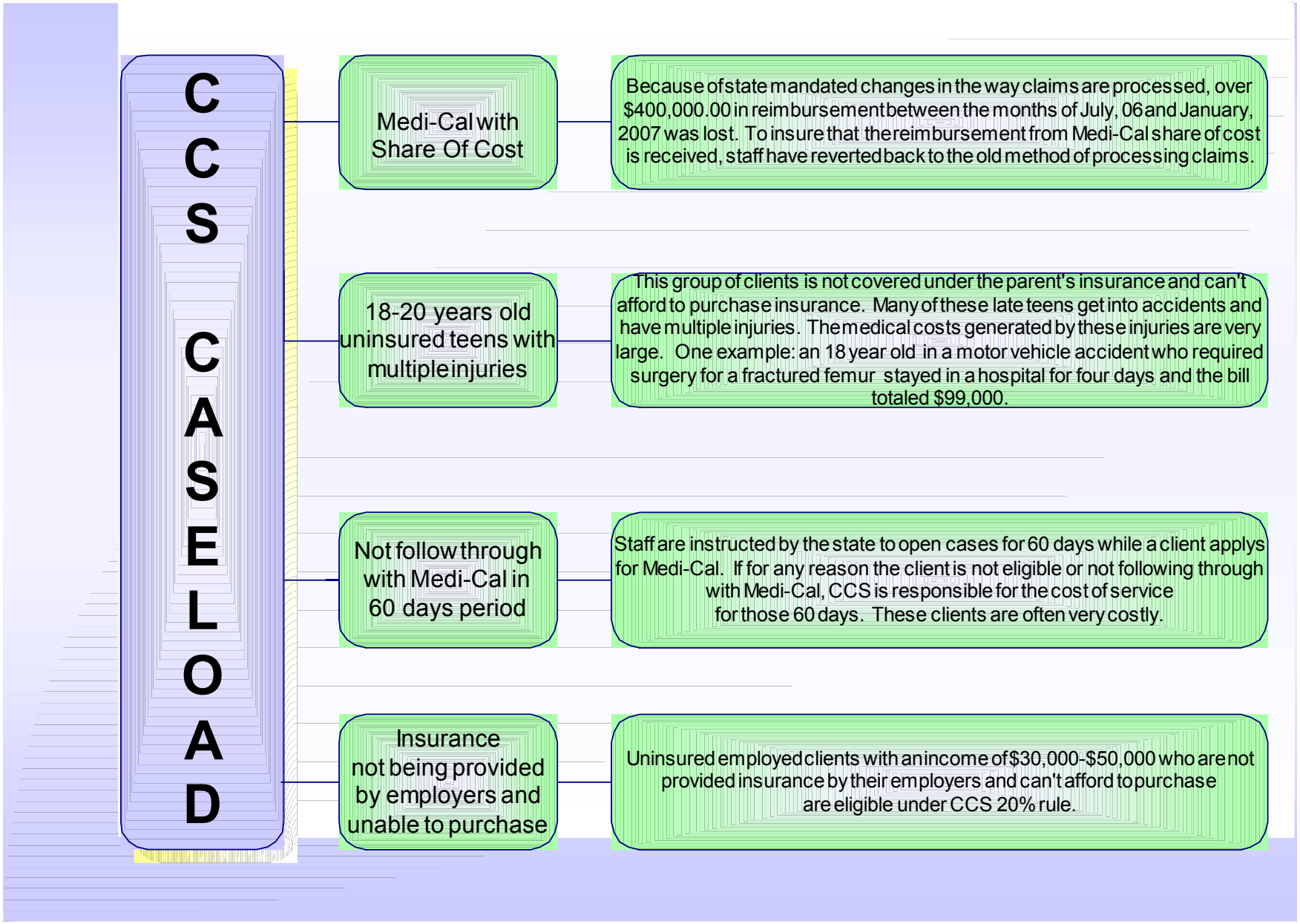
growth for those receiving Healthy Families has increased from 300 in 2002-2003 to 383 in 2005-2006. CCS funded caseload growth has drastically increased from 192 in 2002-2003 to 466 in 2005-2006. The current increase is twice the increase of a year ago, and represents an increase of more than six times the normal yearly increase. This increase in CCS funded cases significantly impacts the allocation required to meet the demands. Of the new cases that have come in during the last year Medi-Cal cases have increased by 6.8%, Healthy Families have increased by 29.4% while CCS-funded cases have increased by 120%.

Unfortunately, funding allocation for CCS remained stagnant while the number of children receiving services has continued to increase. The severity of the case and resultant treatment dramatically influence the cost per case. Another significant factor is the sharp increase in the number of undocumented cases. These cases are not eligible for Medi-Cal or Healthy Families and therefore the medical costs are remanded to CCS for coverage. In addition, the State process improvements have resulted in inefficiencies to the county. Claims were processed through CCS to the State prior to the implementation of an electronic process, which allows providers to bill directly to the State. This results in providers billing to Electronic Data System (EDS) rather than have the patient apply for Medi-Cal and pay the share of cost, while the provider waits for additional reimbursement from the State. Providers will bill EDS instead and EDS charges the county CCS program for the reimbursement. Subsequently, staff has had to revert to manually processing the share of cost claims in order to obviate this particular concern. The county contribution has increased from $227,326 in 2003-2004 to $425,545 in 2006-2007. This increased coverage was made available due to the department's use of one time only revenue from the Public Health restricted fund balance. Continued caseload growth will continue to impact the Agency's Public Health Budget.

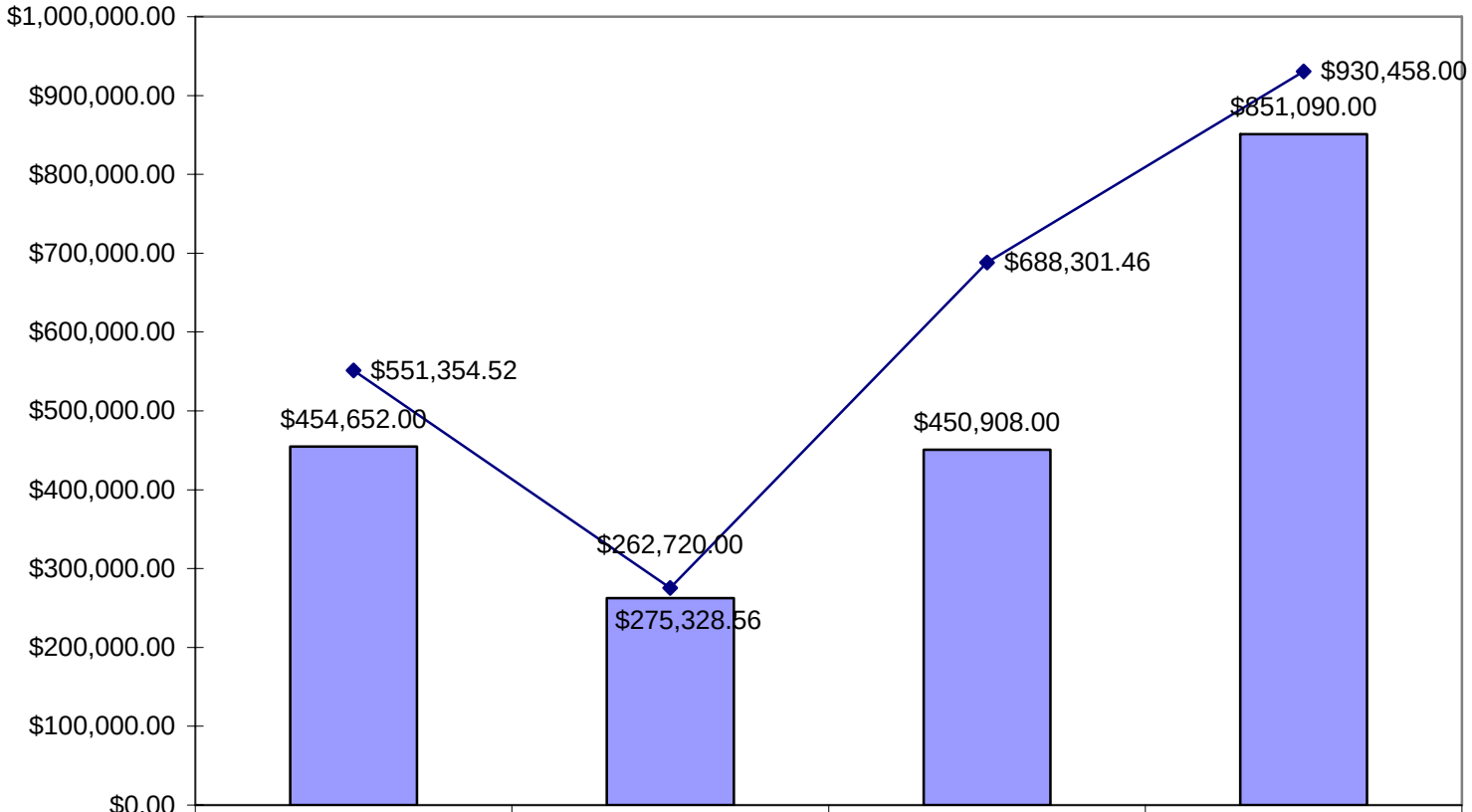
The following pages provide the following examples:

- Caseload Growth
- Medi-Cal Share of Cost contributing factors (SOC)
- CCS Allocation vs. Actual Expenditures
- Providers billing to the CCS budget
- Cost to the Program of a Client not paying the SOC

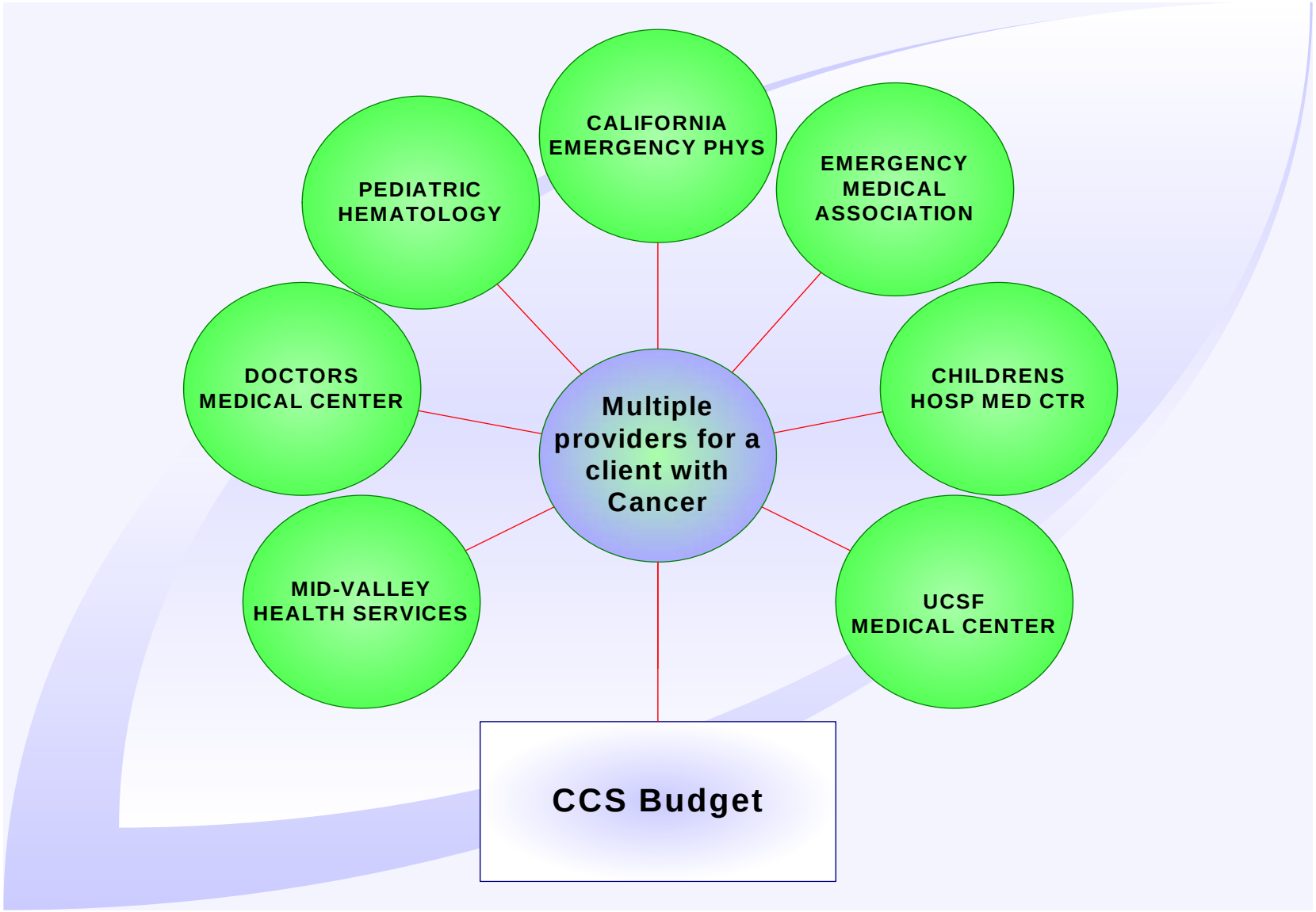

CCS CASELOAD
Dramatic increase in CCS Caseload
This year CCS is facing a case load that has more than doubled since last year . An increase of over six times the normal increase from year to year.
High dollar cases
Treatment for cases like Cancer, Hemophilia, Severe Cerebral Palsy, Spina Bifida and Diabetes often cost more than $400,000 per year per client. Because this year there is double the number of clients, there is a statistically significant increase in the number of these cases.
Continuing service for high dollar cases
Advances in medical care means more high dollar terminal cases are living longer increasing their total cost dramatically.
Not eligible for Medi-Cal and Healthy Family
The rise in this group is caused by a sharp increase in the number of undocumented cases. This category now makes up the largest number of CCS cases. Clients are referred to Kaiser kids as appropriate. Unlike Medi-Cal, CCS has no statutory method to be able to deny services if a family doesn't comply with completing applications for eligiblity.

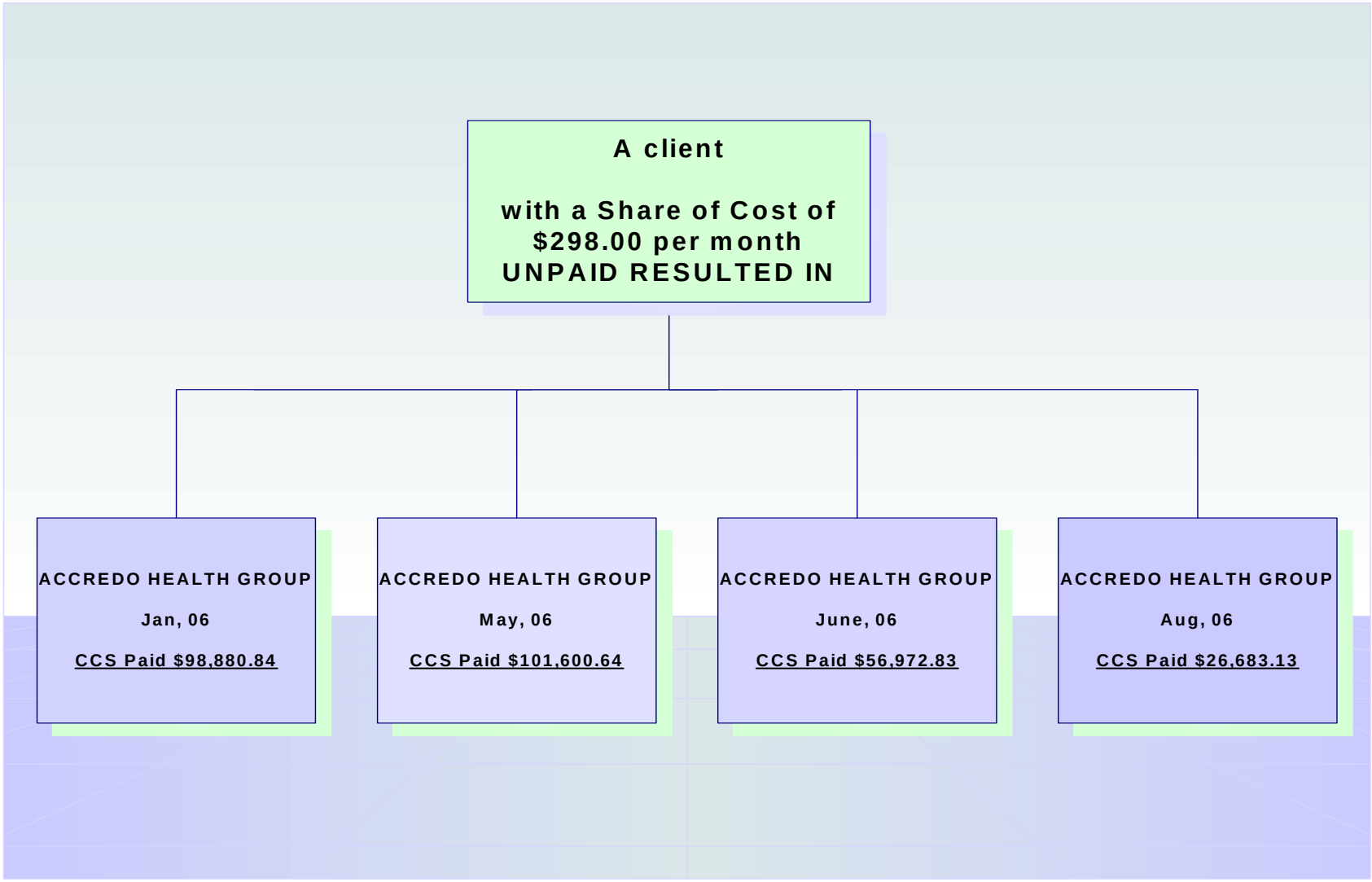

CCS CASELOAD
Medi-Cal with Share Of Cost
Because of state mandated changes in the way claims are processed, over $400,000.00 in reimbursement between the months of July, 06 and January, 2007 was lost. To insure that the reimbursement from Medi-Cal share of cost is received, staff have reverted back to the old method of processing claims.
18-20 years old uninsured teens with multiple injuries
This group of clients is not covered under the parent's insurance and can't afford to purchase insurance. Many of these late teens get into accidents and have multiple injuries. The medical costs generated by these injuries are very large. One example: an 18 year old in a motor vehicle accident who required surgery for a fractured femur stayed in a hospital for four days and the bill totaled $99,000.
Not follow through with Medi-Cal in 60 days period
Staff are instructed by the state to open cases for 60 days while a client applys for Medi-Cal. If for any reason the client is not eligible or not following through with Medi-Cal, CCS is responsible for the cost of service for those 60 days. These clients are often very costly.
Insurance not being provided by employers and unable to purchase
Uninsured employed clients with an income of $30,000-$50,000 who are not provided insurance by their employers and can't afford to purchase are eligible under CCS 20% rule.

Stanislaus County CCS Allocation



	2003-2004	2004-2005	2005-2006	2006-2007
Total Allocation	$454,652.00	$262,720.00	$450,908.00	$851,090.00
Used Funds	$551,354.52	$275,328.56	$688,301.46	$930,458.00


CALIFORNIA EMERGENCY PHYS
PEDIATRIC HEMATOLOGY
EMERGENCY MEDICAL ASSOCIATION
DOCTORS MEDICAL CENTER
Multiple providers for a client with Cancer
CHILDRENS HOSP MED CTR
MID-VALLEY HEALTH SERVICES
UCSF MEDICAL CENTER
CCS Budget


A client
with a Share of Cost of $298.00 per month UNPAID RESULTED IN
ACCREDO HEALTH GROUP
Jan, 06
CCS Paid $98,880.84
ACCREDO HEALTH GROUP
May, 06
CCS Paid $101,600.64
ACCREDO HEALTH GROUP
June, 06
CCS Paid $56,972.83
ACCREDO HEALTH GROUP
Aug, 06
CCS Paid $26,683.13

CHAPTER XIII: CALIFORNIA CHILDREN SERVICES MEDICAL THERAPY UNIT

California Children Services Medical Therapy Unit (MTU) provides physical and occupation therapy for those children eligible and present with diagnosis that necessitate such services. Physical and/or occupational services are provided to 525 children a year, which translates to 525 medical records a year. In an effort to improve efficiencies by the creation of electronic records, the State has initiated the implementation throughout California.

This program promises to be quite challenging, but very worthwhile with producing a very comprehensive therapy evaluation summary that will be a consistent format statewide. It is envisioned that there will eventually be a paperless system.

MTU Online Software

CCS-MTU therapists have recently (January 2007) been trained in the use of the MTU Online software. Stanislaus is the thirteenth county to implement the system. It is a clinical management tool created by James Boyd, M.D., CCS State Medical Consultant, and Evie Fong-Lee, RPT, Chief Therapist, Sacramento County CCS. The main objectives of the system are to:

- Create an easy & efficient tool for therapists to use when writing patient evaluations
- Ensure that reports written include all of the necessary information needed for compliance with data reporting required by Medi-Cal from Certified Outpatient Rehabilitation Centers (This is what CCS Medical Therapy Units are designated as)
- Ensure that reports are written in a consistent manner, therapist to therapist and county to county
- Allow for an expedient method for recording of FISC (Functional Improvement Score) and NISS (Servomotor Impairment Severity Scale) scores. These are patient evaluation tools mandated by state CCS.
- Create a method for direct reporting of PTR (Patient Treatment Record) for billing
- Eventually allow for a paperless clinical management system

MTU Online will result in cost savings to the county:

- Once a therapist becomes proficient in the use of MTU Online for report writing, each patient summary report should take considerably less time to create. This will result in cost saving. Staff cannot bill Medi-Cal for documentation time, so report-writing time is not re-imbursible. The system has many dropdown menus and auto populates from one screen to another so information has to be entered only once.
- It automatically creates a Medical Therapy Plan for the physician to sign, thus serving as a therapy Rx. and eliminating the need for the therapists to write out a separate Rx.

- The therapists' summaries can also be incorporated with the physician's MTC (Medical Therapy Conference) note to create a Comprehensive Clinic Report.
- FISC & NISS scores will automatically be sent to State CCS, thus eliminating the time-consuming task of tabulating treatment service units and patient scores for filling out our annual report.
- Upcoming Version 5 will require patient treatment data to be entered on only one site for eventual billing. Currently this data has to be inputted three different times.
- Supervising therapists & administrators can run several different types of reports to analyze for the potential process improvement.

Dr. Boyd visited the Medical Therapy Unit in January 2007 and determined that the Health Services Agency system is complete and ready for implementation.

CHAPTER XIV: PROCESS IMPROVEMENT: CCS PATIENT EVALUATION

Problems of previous process	**Advantages of MTU Online process**
Reports lacked standardized format & content, therefore potentially less reader-friendly, not containing all necessary evaluation elements to meet Medi-Cal requirements for Outpatient Rehabilitation Centers (CCS Medical Therapy Units are certified as OPRCs), and not consistent, therapist to therapist, county to county.	Ensures that reports written include all of the necessary information needed for compliance with data reporting required by Medi-Cal for OPRCs. It ensures that reports are written in a consistent standardized, organized manner.
Lacked capability to easily incorporate therapists' patient evaluation summaries with clinic physician's note for a comprehensive Medical Therapy Conference (MTC) Summary.	Therapists' summaries can be incorporated with the clinic physician's note to create a comprehensive MTC report.
Required separate writing of Medical Therapy Plan for physician to sign as therapy Rx	Automatically creates a Medical Therapy Plan for the physician to sign, thus serving as a therapy Rx. and eliminating the need for the therapists to write out a separate Rx.
Required time-consuming multiple input of same patient information for reports, therapy prescriptions, data collection & reporting, and billing. No available drop-down menus.	MTU Online is an easy & efficient tool for therapists to use when writing patient evaluations. It provides for easy maintenance of evaluation elements. The system has many timesaving dropdown menus and auto-populates from one screen/report to another so that information only has to be entered once. It eventually will allow for paperless clinical management.
Evaluation elements not stored on a database so less easily maintained	Provides convenient online access. Evaluation elements are stored and updating them is easily accomplished in less time.
Manual inputting of data onto spreadsheet for annual report was very time-consuming. Higher probability of human error in tabulating treatment service units and FISC (Functional Improvement Score)& NISS (Neuromotor Impairment Severity Scale) scores for annual reporting to State CCS.	Provides an expedient method for recording of FISC) and NISS) scores. It eliminates the occurrence of tabulation mistakes in transferring of data. FISC & NISS scores will automatically be sent to State CCS.
No availability of data of treatment outcomes for analysis by supervisors, for possible process improvement No availability of automatic graph plotting to track patient progress, or lack of it	Plots Functional Improvement Scores on a graph for analysis of progress (or lack of progress) of patient receiving therapy services. Goals & treatment strategies are archived & can be referenced. Supervising therapists & Administrators can run various reports to analyze for potential process improvement/caseload management.
Patient treatment data needs to be inputted three different times at three different locations for Medi-Cal billing.	Upcoming Version 5 will have a method for direct reporting of Patient Treatment Record (PTR) for Medi-Cal billing so data will only have to be inputted once.

CHAPTER XV: PUBLIC HEALTH LABORATORY

When it comes to efficiency, the Stanislaus County Public Health Laboratory covers more population per position than any other county public health laboratory in the state of California. Its 3.35 workers offer a wide array of services and tests to the residents of Stanislaus County.

Stanislaus County Public Health Laboratory tests water for bacterial contamination from parks, reservoirs and dairies, helping provide safe recreational facilities and safe food. When Modesto Junior College had a contaminated water faucet, they turned to the Public Health laboratory to help them determine the causative agent.

The Public Health Laboratory worked with the Department of Environmental Resources and the Communicable Disease Nurses to create a protocol and procedures for foodborne illness. Contaminated food can be tested in the Public Health Laboratory to identify a causative microorganism. To ensure accuracy, the Public Health Laboratory yearly tests specimens sent by the U.S. Food and Drug Administration. In addition, food handlers carrying infectious diseases are cleared of contagious infections to return to work by cultures performed by the Public Health Laboratory.

Nondiagnostic General Health Assessments (e.g., blood glucose screenings offered at a Costco or cholesterol screenings at a Safeway) performed in Stanislaus County are required to register with the County. The Public Health laboratory reviews the procedures and personnel qualifications according to State law, to ensure the public's safety.

Refugees are screened for parasites.

The Public Health Laboratory tests biting animals, bats, or other suspicious animals for Rabies. If not treated within ten days of exposure, rabies has a fatality rate of nearly 100%.

The Stanislaus County Public Health Laboratory performs tests to identify sexually transmitted diseases such as AIDS (HIV), syphilis, chlamydia, and gonorrhea.

Tuberculosis (acid fast bacilli) cultures are processed and read for Memorial Medical Center, Emanuel Medical Center, and Tracy Sutter Hospital, as well as for the Public Health Department and HSA.

The Stanislaus County Public Health Laboratory is on the forefront of emerging infectious diseases. Tests for West Nile Virus are performed for area hospitals. When SARS was suspected in a Turlock child, and community physicians would not treat children that went to the same elementary school, the Public Health Laboratory sent specimens obtained by the Public Health CD Nurses to the State Laboratory for testing. When another causative organism was identified, the furor died down and peace was restored.

Stanislaus County Public Health Laboratory is a reference laboratory for the community and the local laboratories. This consists of education, testing, and referrals.

Stanislaus County Public Health Laboratory staff have provided continuing education for medical professionals, informative talks to MJC students, local landlords, elementary schools, and service clubs, to name a few. Clinical Laboratory Scientist and Public Health Microbiologist students from Stanislaus and from Merced and Humboldt counties have been trained in Parasitology and Mycobacteriology

Public Health Laboratory staff, who are Public Health Microbiologists (PHMs) consult with local laboratories when requested, and work on problem organisms that local laboratories are unable to identify. They perform cultures for the Coroner.

Many specimens are referred to State, National (CDC), or other local public health laboratories for specialized and unusual tests, or tests that are beyond the scope of testing of the county's local laboratory. For example, adult wound, and infant botulism specimens are referred to the State Microbial Diseases Laboratory. Suspected Norovirus outbreak specimens are referred to the State Viral and Rickettsial Diseases Laboratory. Rare and unusual organisms may go to the State and even to CDC for characterization and identification.

After September 11, 2001, the Public Health Laboratory became involved with bioterrorism and emergency preparedness in a new way. A national network, the Laboratory Response Network (LRN) was set up. Training was provided to and given by the Stanislaus County Public Health Laboratory Staff. The Stanislaus County Public Health Laboratory sponsored a local workshop to educate local laboratorians about the bioterrorism agents, and how to deal with them. A notebook was created and distributed to local laboratories and hospitals. Site visits were made to the laboratories, and mutual aid in the event of disasters was discussed. Local laboratorians were notified of and encouraged to attend bioterrorism workshops sponsored by other public health laboratories. An updated notebook was distributed and sites visits made in 2005-2006. Additional training has been provided. Furthermore, a closer relationship has been established with the San Joaquin County Public Health Laboratory. San Joaquin County Public Health Laboratory tested all the environmental samples from the county during the anthrax scare, and has provided some training for laboratorians in this community.

The staff of the Stanislaus County Public Health Laboratory has worked hard to create strong relationships with other laboratories and to provide the best possible laboratory testing in support of creating a safe, prepared, and healthy community. Below, are test volumes and site visits conducted by the PH Laboratory in an effort to foster relationships and improve the health of this community.

STANISLAUS COUNTY PUBLIC HEALTH LABORATORY
2006 TEST VOLUME*

MONTH	AFB	BACTI	FUNGUS	O&P	S-HIV	O-HIV	SYPHILIS	CT/GC	WNV	WATER	RABIES	REFER
JAN	113	11	10	1	66	158	16	1260	4	27	5	18
FEB	89	19	3	18	83	231	9	1086	1	11	6	15
MAR	74	15	13	3	102	208	2	1319	3	26	3	24
APR	68	13	1	24	263	95	8	1197	4	25	5	25
MAY	87	20	6	7	289	85	13	1348	4	30	3	23
JUN	79	24	1	36	245	119	31	1211	8	42	7	34
JUL	81	25	2	23	261	212	27	1054	5	36	3	37
AUG	100	47	0	79	376	356	27	1292	10	343	9	39
SEP	67	30	7	30	248	241	39	1119	13	23	5	34
OCT	75	29	4	122	267	201	52	1146	6	17	0	32
NOV	63	10	4	88	232	245	31	1125	4	14	4	23
DEC	85	17	3	130	216	223	36	1078	2	22	4	27
TOTAL	**981**	**260**	**54**	**561**	**2648**	**2374**	**291**	**14,235**	**64**	**616**	**54**	**331**

*Test Volume is specimen tests only; it does not include controls, repeats, or surveys.

Site Visits

2002 Site Visits, Information Collected, and Binders Delivered by Stanislaus County Public Health Laboratory

Doctor's Medical Center
Memorial Medical Center
Emanuel Medical Center
Stanislaus State Health Center - D/C'd microbiology testing 2004
Oak Valley Hospital
Stanislaus County HSA Clinical Laboratory

2005/6 Site Visits, Binders Delivered by Stanislaus County Public Health Laboratory

Members of CD Task Force - 2005
Stanislaus County HSA Clinical Laboratory – August, 2005 – 2 binders - D/C'd microbiology testing 3/2006
Memorial Medical Center – February 1, 2006 – 3 binders
Doctor's Medical Center – February 2, 2006 – 3 binders
Kaiser Lab, 3800 Dale Road (no Microbiology testing) – February 10, 2006 – 1 binder
Oak Valley Hospital – February 24, 2006 – 2 binders
Emanuel Medical Center – May 5, 2006 - 2 binders
San Joaquin County Public Health Laboratory – June 23, 2006 – 2 binders

CHAPTER XVI: ATLAS SYSTEM: CASE MANAGEMENT AND WEBvCMR

Part I: Case Management Tracking

The goal of securing a computerized tracking system with appropriate software was the impetus behind contracting with Atlas. The initial funding for the project, designed to acquire data for the Healthy Birth Outcomes Project, originated from the Stanislaus County Children And Families Commission (Prop. 10). The process of reviewing software started in fiscal year 2004-2005.

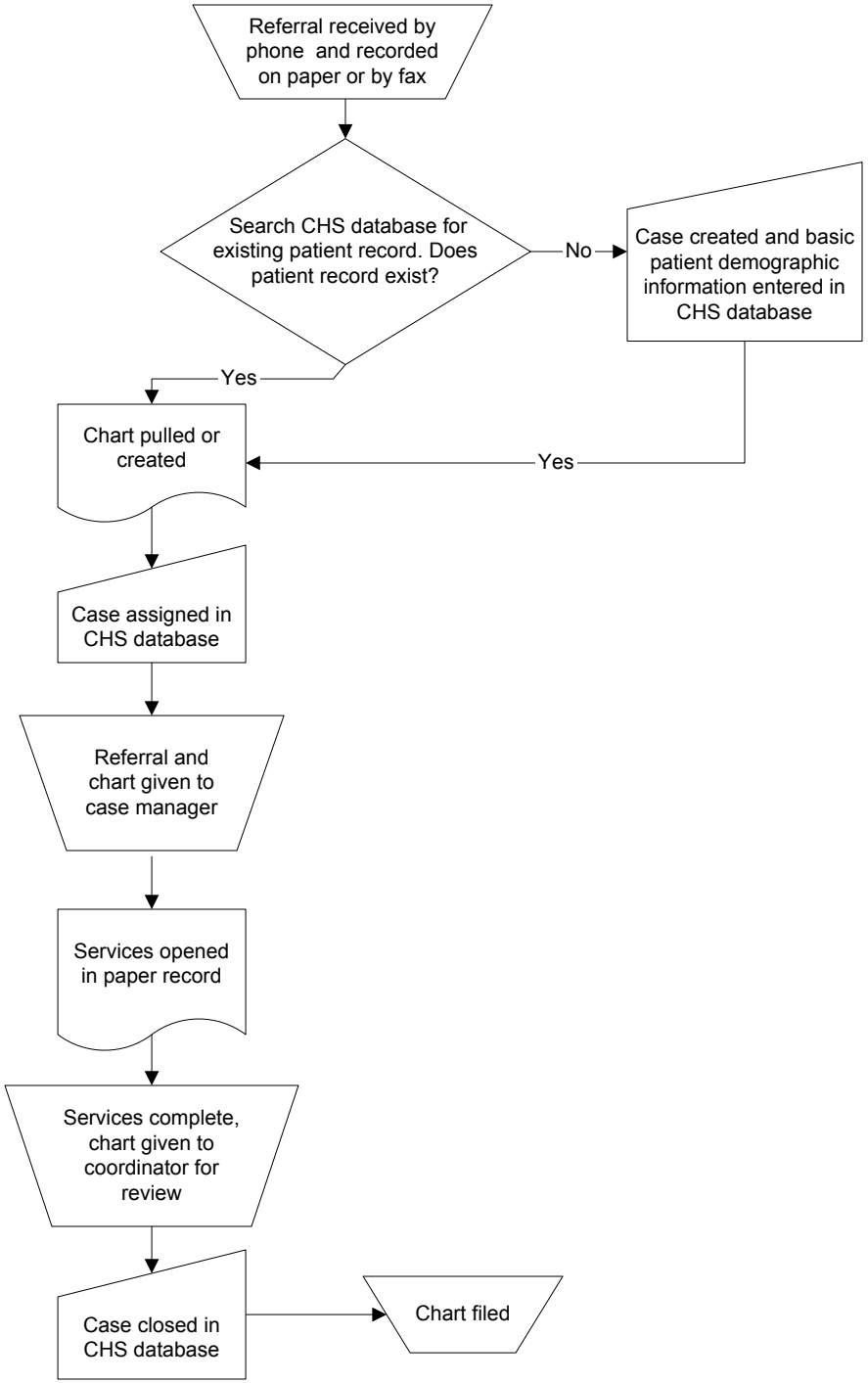
May 27, 2005 a unanimous decision by Information Technology (IT), case-management staff and supervisors was made to seek the Board Of Supervisors approval to contract with Atlas Public Health, a division of the Atlas Development Corporation to integrate Web Visual Confidential Morbidity Report (WebvCMR) and Nurse Case Management (NCM) software into the Public Health Division information systems and user workflow.

The project kickoff meeting to begin developing the tracking system for Healthy Birth Outcomes was held November 1-2, 2005. Atlas demonstrated the ability to provide the following:

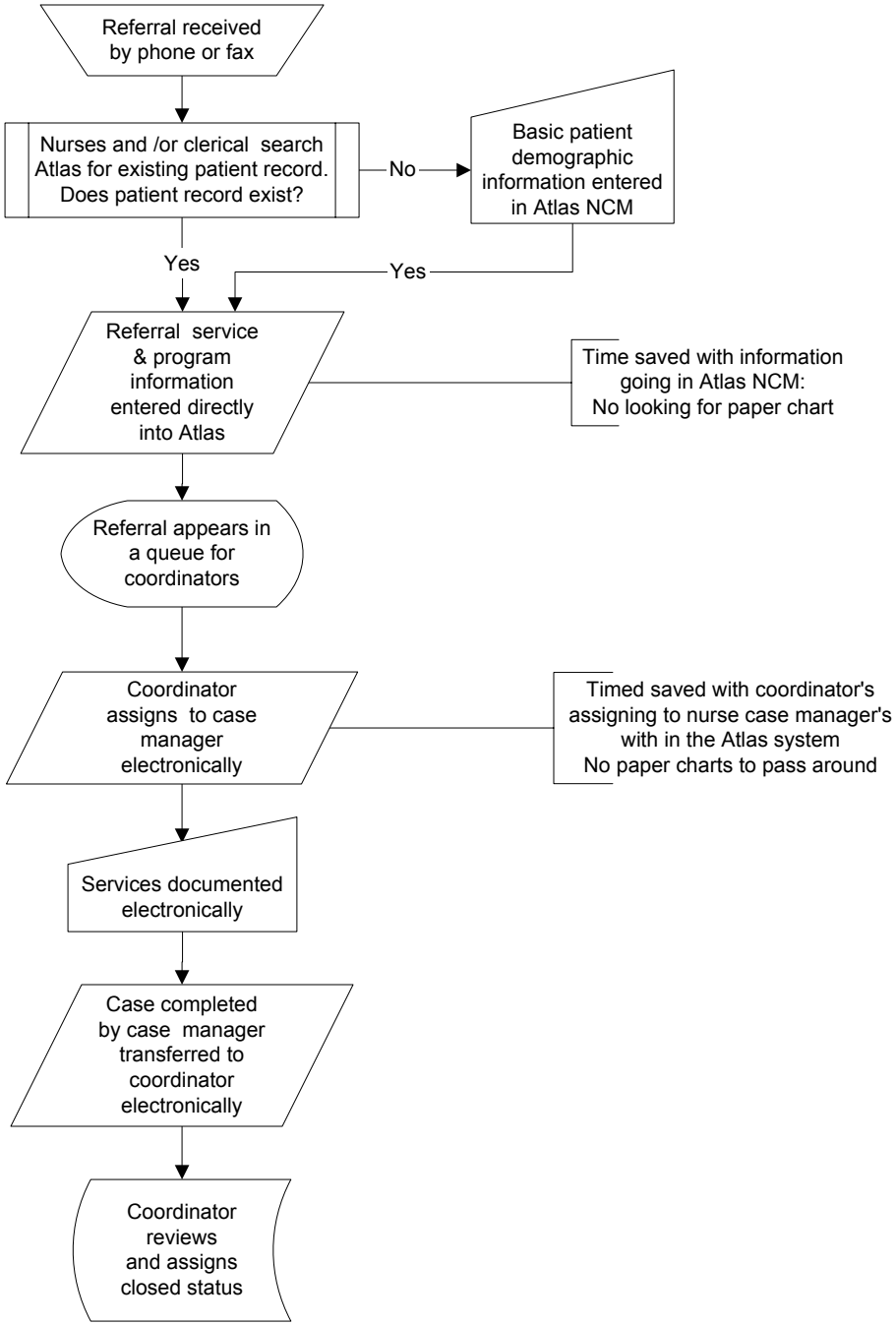
1. Integration of all public health programs
2. Design a cafeteria plan where each program area could determine its individual costs
3. Establish standardized vocabularies
4. Track caseloads
5. Provide lab reports and tracking

The diagram below illustrates the Process Improvement in implementing the Case Management software into the Healthy Birth Outcomes Project.

Before Atlas System



Atlas System in Place



Part II: WebvCMR

Communicable Disease Reporting & Visual Confidential Morbidity Report

The threat posed by infectious diseases has grown. New diseases, unknown in the United States just a decade ago, such as West Nile virus and severe acute respiratory syndrome (SARS), have emerged. To detect cases of infectious diseases, especially before they develop into widespread outbreaks, local, state, and federal public health officials as well as international organizations conduct disease surveillance. In addition to naturally occurring infectious disease outbreaks, there is also the threat posed by the deployment of infectious disease pathogens as weapons of war or instruments of terror.

Disease surveillance is the process of reporting, collecting, analyzing, and exchanging information related to cases of infectious diseases.

Accurate identification and timely reporting of communicable diseases is an integral part of successful disease control that enables the health department to provide epidemiological follow up or disease intervention without delay. Communicable disease reporting is a legal requirement placed upon health care providers.

Reporting assists in identifying contact/s who may be infected or other individuals at risk of infection. Failure to report or slow reporting may allow the disease to spread, which may require additional resources for intervention.

Case reports are used to determine the incidence and prevalence of disease in a specific area. They enable the health department to target and implement prevention and control measures, and evaluate their effectiveness.

Finally, the information gathered permits the health department to request appropriate funding, plan for resource allocation, implementation and evaluate activities.

Center for Disease Control (CDC) has developed CDC Preparedness Goals that are directly linked to the health protection of the public. Preparedness Goals 2 – 6 stipulate that local health departments will:

- Decrease the time needed to classify health events as terrorism or naturally occurring in partnership with other agencies.
- Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food or environmental samples that cause threats to the public's health.
- Improve the timeliness and accuracy of communications regarding threats to the public's health.
- Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health.
- Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health.

The threat of emerging infections and bioterrorist attacks has heightened the need to make disease surveillance more sensitive, specific, and timely. Recent advances in provider and laboratory information management have facilitated one step towards the modernization of surveillance: the development of automated reporting systems. With recent funding for activities to defend the public's health against terrorism and naturally occurring diseases, development of automated reporting systems has been accelerated.

To address the CDC goals and the Board's priorities of a safe and a healthy community, Stanislaus County Health Service Agency – Public Health Division, in conjunction with Atlas Public Health Corporation, has implemented a secure web-based reporting system called WebvCMR (Confidential Morbidity Report). The overall objective of the "WebvCMR" system is to enhance and strengthen local disease surveillance capacity and promote public health. WebvCMR is Health Insurance Portability and Accountability Act (HIPAA) compliant, providing a secure environment for reporting. The system will provide a method of collecting and following-up CMR information more efficiently and effectively. For health care providers and laboratories, the reporting of CMRs will become simplified and automated.

Staff have identified 241 reporting entities in Stanislaus County, including four local hospitals, clinics and individual physicians, and anticipate having 25 health providers trained and using the system by early summer.

Board Priority: A SAFE COMMUNITY

WebvCMR:

- Supports the communicable disease investigation efforts and those surrounding any acts of bioterrorism.
- Improves the sensitivity and timeliness of routine disease surveillance thus facilitating a more effective public health intervention.
- Decreases the response time for investigating and intervening on public health cases.
- Improved availability of disease data results in improvements in public health policy making.
- Will support the communicable disease investigation efforts and those surrounding any acts of bioterrorism.

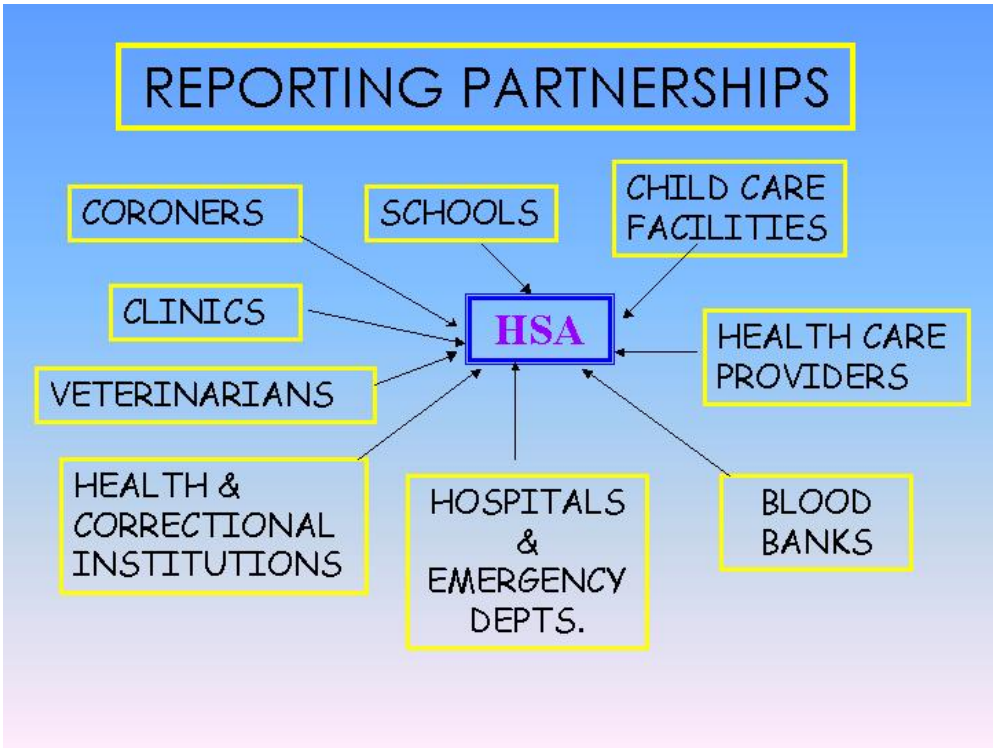
Board Priority: A HEALTHY COMMUNITY

- Disease reporting provides protection for the community and promotes healthy quality of life by identifying disease.
- Once identified, spread of disease can be controlled to reduce its overall effect on the community.
- Electronic reporting can dramatically reduce the time between identification by a provider and notification to the public health department.
- Once a report is submitted, appropriate interventions can be implemented to reduce the spread (i.e. tainted spinach).

- Assist public to make better decisions about their own health.

Board Priority: EFFECTIVE PARTNERSHIPS

- Promotes participation from a variety of stakeholders including public health, hospitals, clinics, and other healthcare providers.
- Facilitates coordination among local public health, State & Federal PH agencies.
- Allows reporting entities to generate reports detailing the cases they reported via WebvCMR.
- Further develops a partnership with California Department of Health Services (CDHS) and the Center for Disease Control (CDC) and enhances their ability to be able to identify outbreaks much quicker across county and state lines.

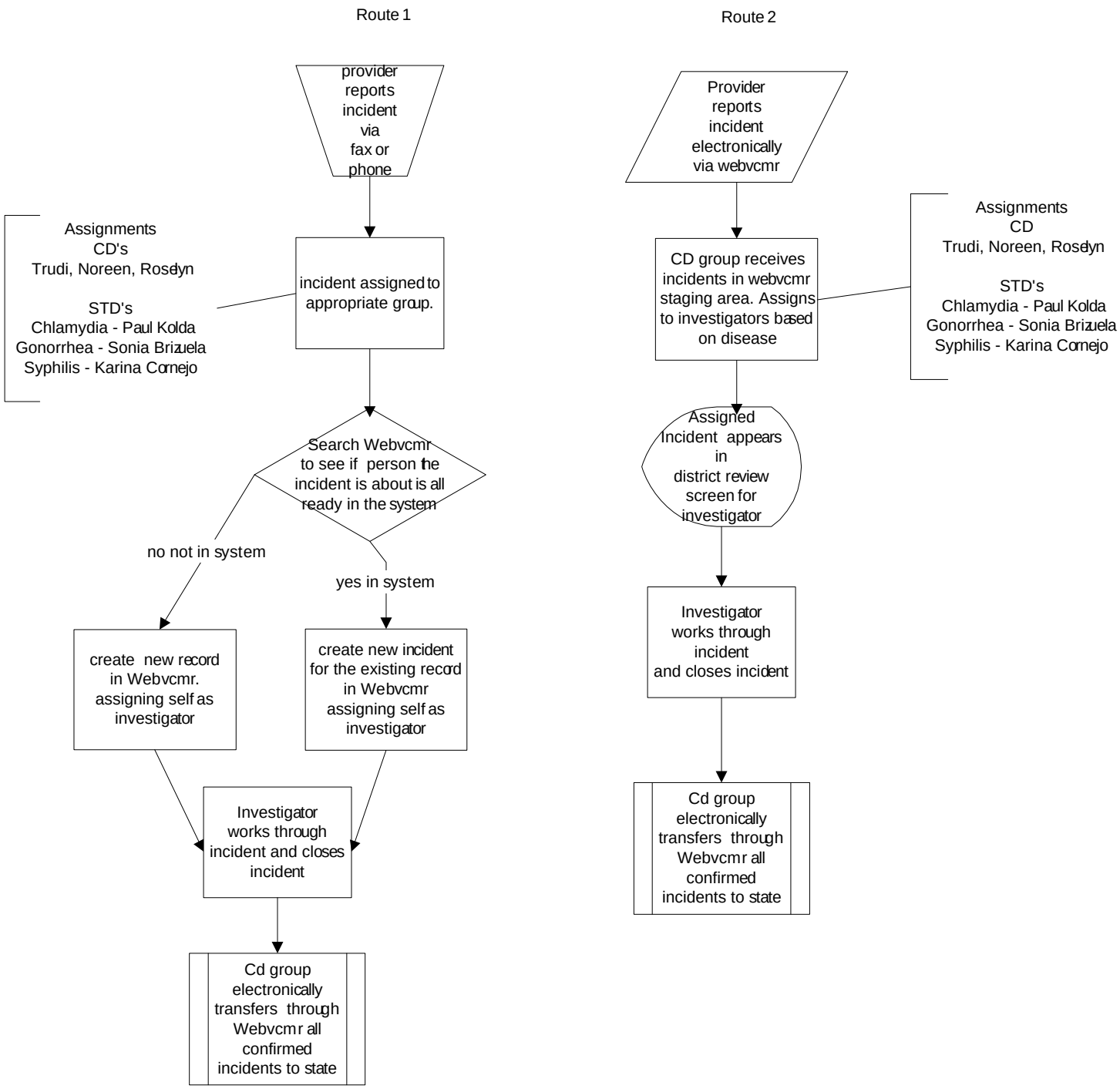


Board Priority: EFFICIENT DELIVERY OF PUBLIC SERVICES

- Real time reporting of communicable diseases
- Eliminates the need for and expense of paper based reporting
- Standardized data for more reliable and quality information
- Decreases the time it takes to report a communicable disease
- Improves the timeliness of reporting
- Decreases the response time for investigating and intervening on public health cases
- Saves time in completing Confidential Morbidity Reports (CMRs)
- Provides listing of cases and reports on cases entered

- Improved availability of disease data results in improvements in public health policy making
- Provides for one system to report communicable diseases, Tuberculosis, and STD cases
- Enables export of data to a variety of analytical software
- Automates routine data functions such as name matching, GIS tracking, and duplicate checking
- Increase in reports due to the simplified and efficient reporting process
- More accurate data – eliminates duplication of records
- Auditing: every change can be tracked by person & time
- More efficient use of time and labor
- System is available from any computer

Webvcmr Process



CHAPTER XVII: VITAL RECORDS-ELECTRONIC DEATH REGISTRATION SYSTEM

Changes in registration of death certificates to the Local Registrar placed significant impact on business processes within the Vital Records Department.

In 2006, implementation of the California Electronic Death Registration System (CA-EDRS) was initiated to make the entire system of registering death certificates and permits for disposition more efficient for funeral homes, physicians, and Vital Records Staff. This process also adhered to legislative law to implement the system in California Counties.

Over the last two years (2005-2006) program staff processed:

- 2005- 3,908 death and 9,699 birth records
- 2006- 3,841 death and 9,429 birth records

The EDR System provides three ways for Funeral Directors, Coroners, and Physicians to register death certificates with the Local Registrar, improving customer service through improved processes.

This process meets the Board of Supervisors Priorities of:

1. Efficient Delivery Of Public Service
2. Effective Partnerships

Health and Safety Code Section 102778(a) specifies that the California Office of Vital Records will implement an Internet-based electronic death registration system (EDRS) for the creation, storage, and transfer of death registration information. Beginning January 1, 2005, the CA-EDRS Team successfully piloted the EDRS with Yolo and Riverside counties and subsequently allowing other California counties to implement the system.

In April 2006, the Stanislaus County Vital Records Department sent a letter to all funeral directors and coroners notifying them of the intent to implement the Electronic Death Registration System (EDRS) by October 1, 2006. This letter addressed the requirements and hardware they needed to have/procure in order to use the system from their offices.

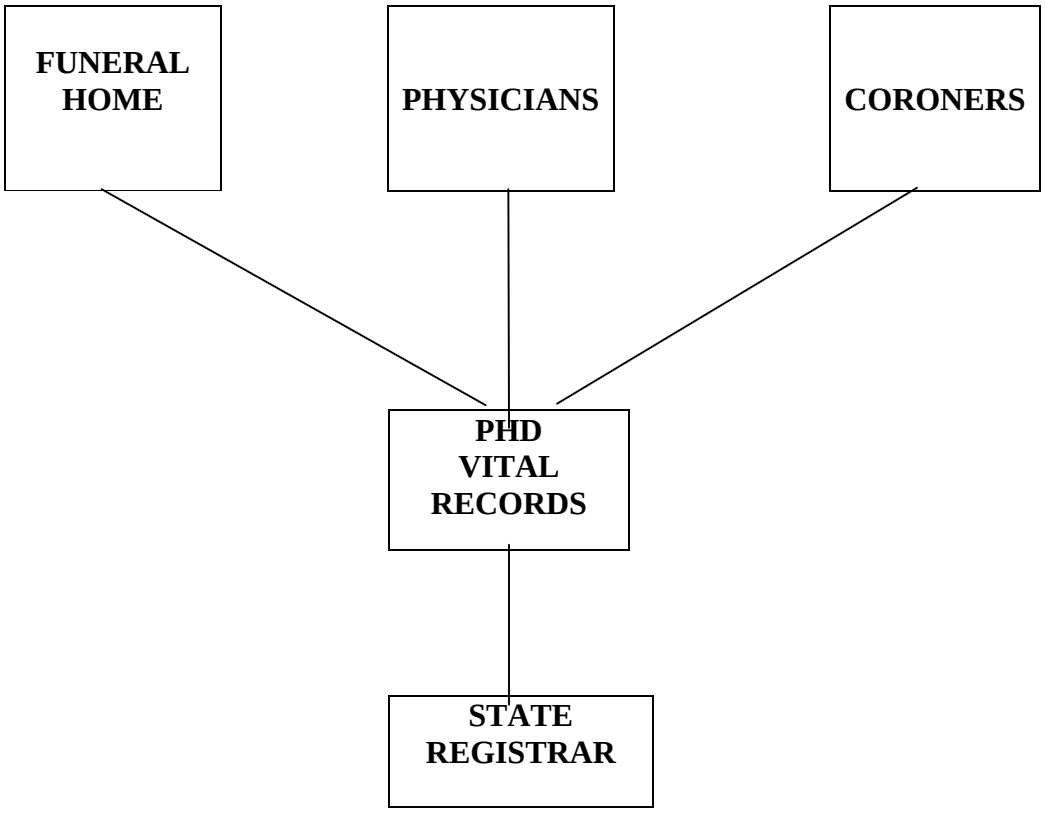
August 2006, most of the funeral homes in Stanislaus had committed to implementing the system and training was scheduled. Today, Stanislaus County has 100% participation in the program with local Funeral Homes and Coroner's Office

The system completed its implementation in October 2006 and this process meets the Board Priorities:

Board Priority: EFFECTIVE PARTNERSHIPS

- Supports the efficient processing of death certificates for funeral directors, coroners, physicians and families.
- Facilitates coordination among public health, funeral directors, physicians and the State.
- Allow all partners to review, complete and submit documents.

Reporting/Partnerships



Board Priority: EFFICIENT DELIVERY OF PUBLIC SERVICES

- Improves accurate reporting of diagnosis and cause of death.
- Provides for one system for review and completion of records.
- Allow the funeral directors to enter a certificate electronically through EDRS even though all the personal information is not available to them.
- Improves timeframe for completion of death certificate.
- Increase efficient use of staff for all concerned.
- Enables the exporting of data to the State.

See Appendix L - Process Improvement, comparing the Non-EDRS Flow vs. the current EDRS electronic process.

CHAPTER: XVIII: RE-ENGINEERING PUBLIC HEALTH

Board Priority: EFFICIENT DELIVERY OF PUBLIC SERVICES

The role of the Public Health Departments (PHD) has changed dramatically within the 21st Century, thereby increasing the demand for governmental health departments. The public health departments are responsible for creating and maintaining conditions that keep people healthy, according to National Association Of County & City Health Officials (NACCHO). Local communities also have a "public health system" that may involve public and private entities engaging in activities that affect the public's health. Local health departments are charged with meeting certain standards. These standards include but are not limited to:

1. Understand the specific health issues confronting the community, and how physical, behavioral, environmental, social, and economic conditions affect them.
2. Investigate health problems and health threats.
3. Lead planning and response activities for public health emergencies.
4. Collaborate with other responders and with state and federal agencies to intervene in other emergencies with public health significance (e.g., natural disasters).
5. Implement health promotion programs.
6. Address health disparities.
7. Develop partnerships with public and private healthcare providers and institutions, community-based organizations, and other government agencies (e.g., housing authority, criminal justice, education) engaged in services that affect health to collectively identify, alleviate, and act on the sources of public health problems.
8. Coordinate the public health system's efforts in an intentional, non-competitive and non-duplicative manner. These standards serve as blueprints for carrying out the Essential Public Health Services. See APPENDIX K – Essential Public Health Services.

The Health Services Agency/Public Health Division (PHD) has engaged in conducting internal and external assessments over the last six (6) years in an effort to determine its preparedness to meet the 21st Century demands. Internal assessments helped determine:

1. The capacity of the department to meet the public health needs of residents in Stanislaus County and the essential public health services.
2. Skill level of the existing and future workforce.
3. Ability of the department to communicate effectively and efficiently.
4. Staff's diversity in relation to that of the community.
5. The department's ability to partner with government, community-based, faith based and other agencies and organizations.
6. Preparation of the department for future accreditation, which is being recommended throughout the nation.
7. Information Technology strengths and weaknesses.

8. Department's fiscal accountability and stability as a non revenue-generating department.
9. Business organizational needs as demonstrated in NACCHO's "Taking Care of Business" document.
10. Research capabilities.

Based on the assessment of the department's needs and the immediate loss of over 75 years of collective department knowledge of history, programs and talents (due to retirements of a number of seasoned public health professionals), the stability and future of the Public Health Division are at a critical stage.

With crisis and/or challenges there is always opportunity. As the Health Services Agency (HSA) began a process of restructuring the Clinical and Supporting Services, the Public Health Division began its process of reengineering and restructuring. Restructuring alone cannot ensure that the division is "public health" ready in providing all of the essential public health services. Looking at those critical tasks that require new skills and way of thinking is germane to the system.

Carol Woltring, Executive Director from the Public Health Institute, was contracted to facilitate a three-week process of:

1) Obtaining information on the strength, weaknesses and opportunities from selected new, current and retiring staff,

2) Leading the Senior PH team also in the same process, determining the existing and desired span of control for effective and efficient management,

3) Engaging the HSA Senior Management team in discussion of the proposed PHD structure as it may relate to the completed HSA restructure,

4) Obtaining information from those state and national Public Health Departments that have restructured and are considered to be "prepared", and

5) Assisting in designing a public health infrastructure for what can be initiated now and what needs to be designed for the longevity of the public health services.

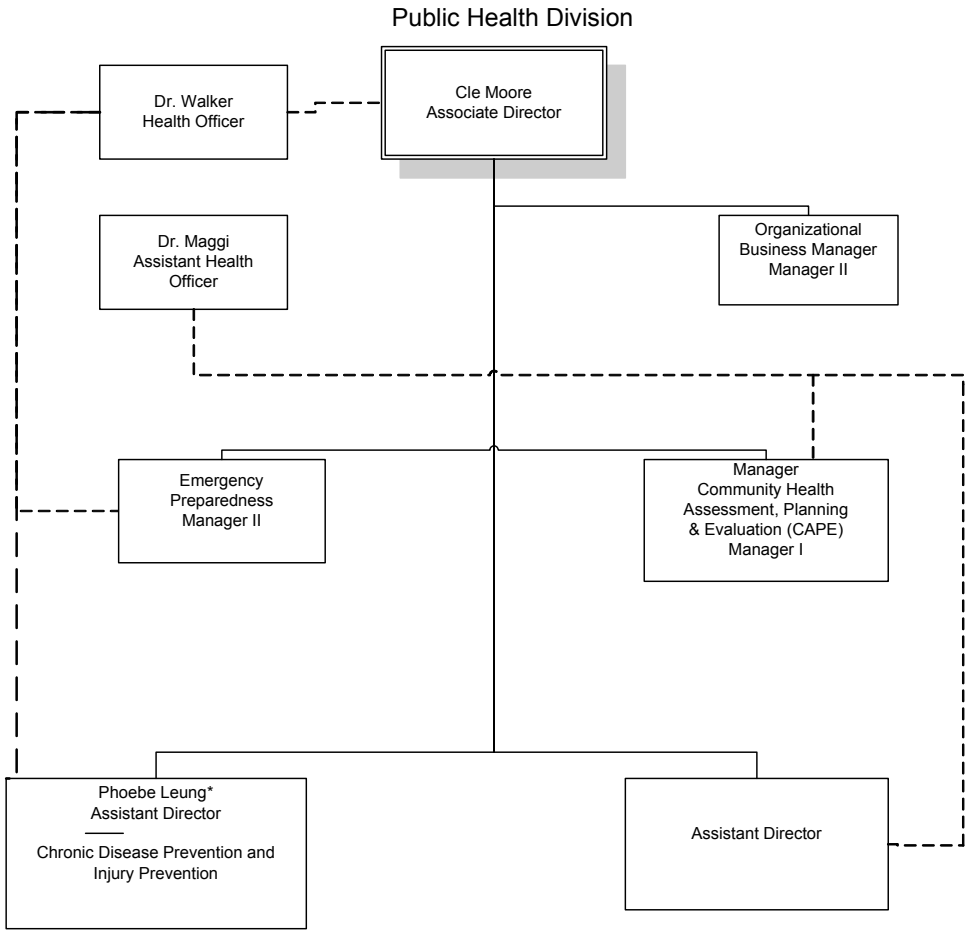
The end of that process occurred and the next process began with the Board of Supervisors' approval of the proposed restructure of the Public Health Division. The restructure allows the PHD to focus on business processes, or efficient public services, which is one of the Board of Supervisors and the National Association of City and County Health Officials priorities. The PHD is not a revenue- generating department, as stated before, thus the business extends to process improvements and efficiencies.

The Assistant Directors provide consistency of services, staffing, training, information and education, overall planning and development of the public health division in its entirety.

The Community Assessment Planning & Evaluation (CAPE) unit affords an opportunity to respond to some of the most important responsibilities of the division: community engagement, community health assessment, planning to meet the needs of the community with the community, and evaluating effectiveness of services that support the community's health within the county.

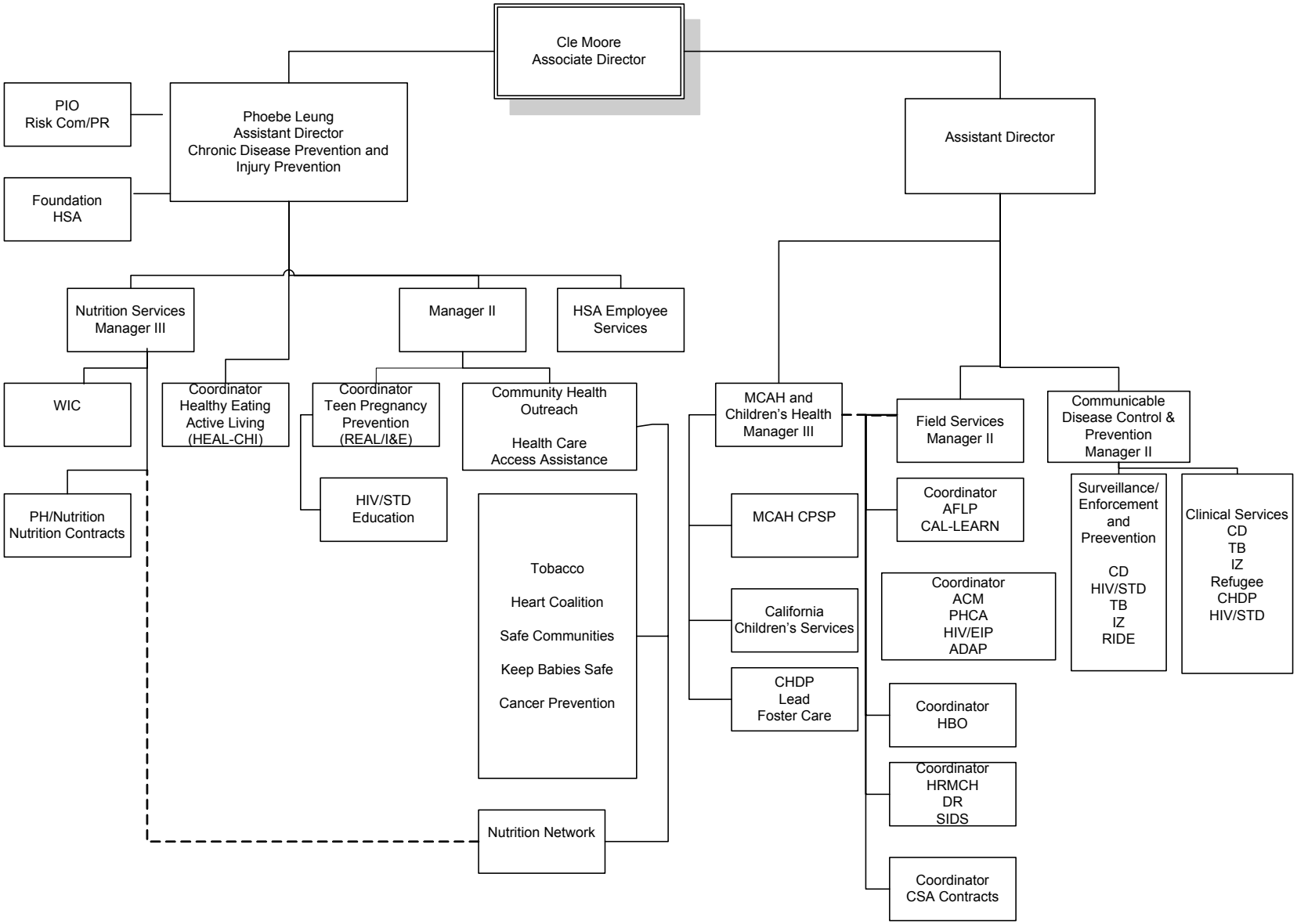
Emergency Preparedness (EP), as one of the most critical concerns within public health today, cannot deliver without an adequate and qualified staff. The restructure allows the program to bring in two positions that can strengthen the infrastructure of the EP Program and ensure the readiness of public health staff and the community to respond in any emergency/disaster.

Stanislaus County Health Services Agency



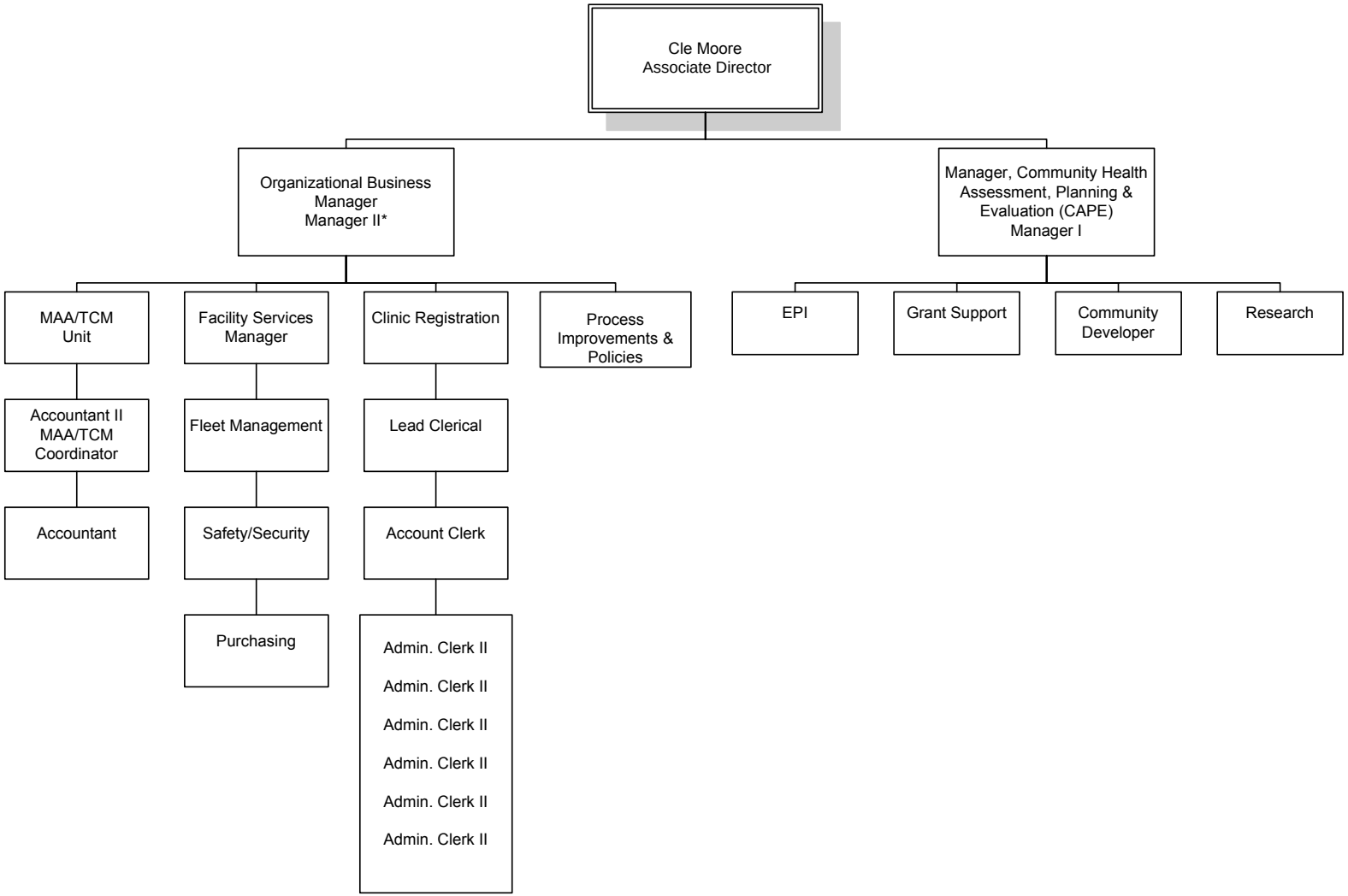
Stanislaus County Health Services Agency

Public Health Division



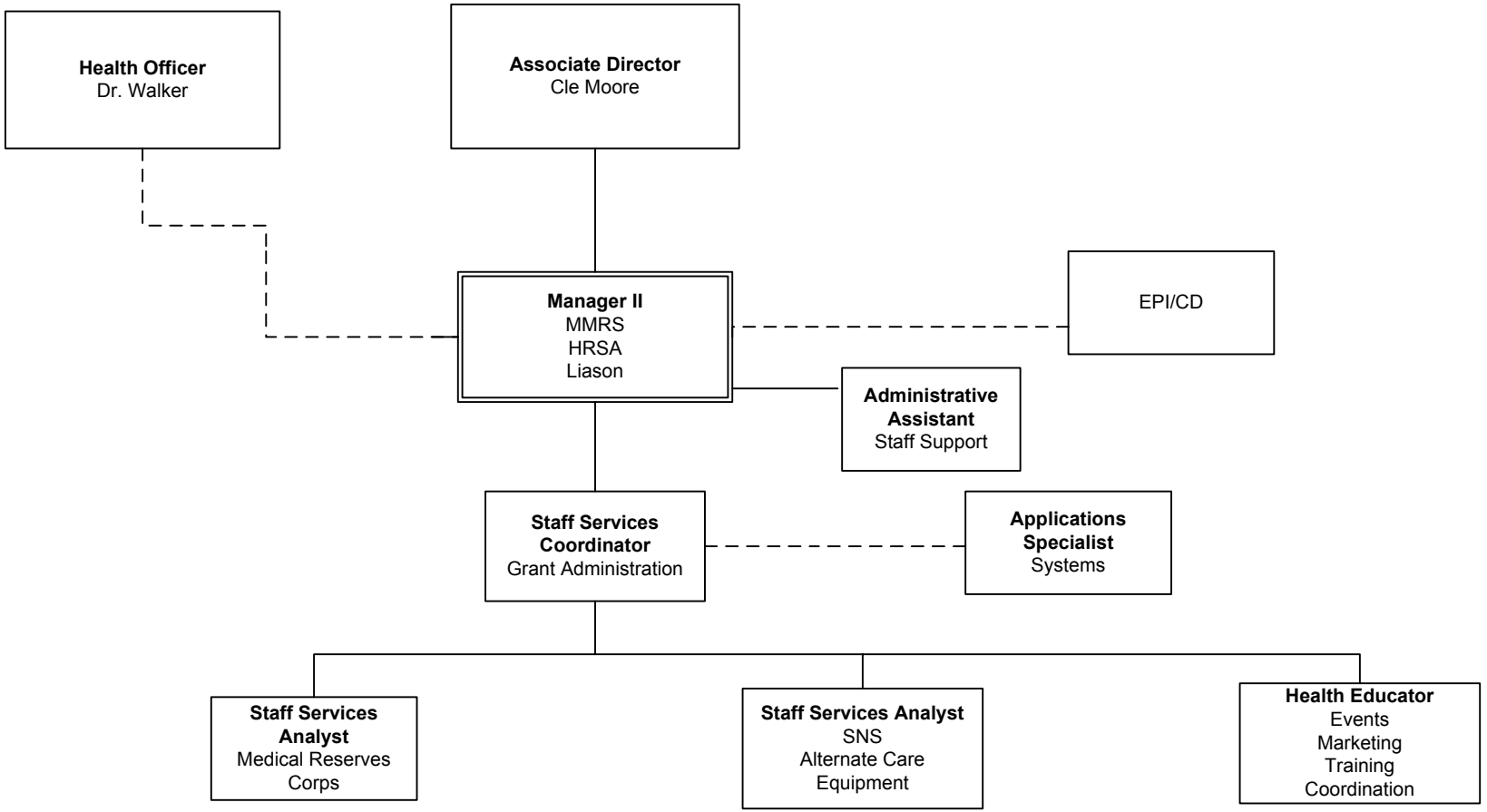
Stanislaus County Health Services Agency

Public Health Division



*Also reports to HSA Assistant Director of Business Services

Emergency Preparedness Org. Chart



APPENDICES

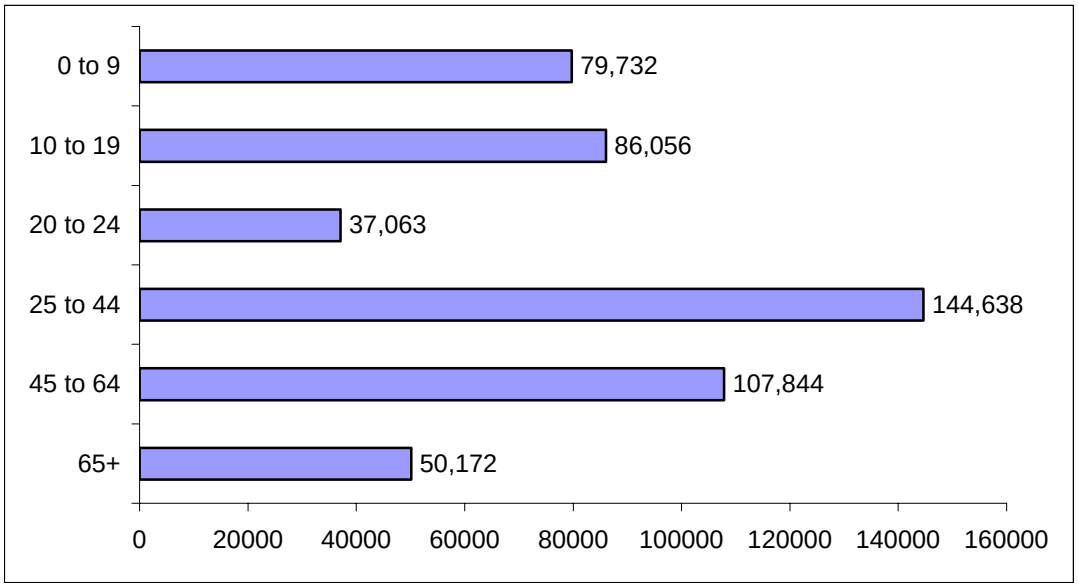
APPENDIX A: AGE AND GENDER

Table A.1 Age breakdown of Stanislaus population, 2005

Age group	Number of People in Select Age Group	Percent (%)
0 – 9	79,732	15.8
10 – 19	86,056	17.0
20 – 24	37,063	7.3
25 – 44	144,638	28.6
45 – 64	107,844	21.3
65+	50,172	9.9
Total	505,505	100.0

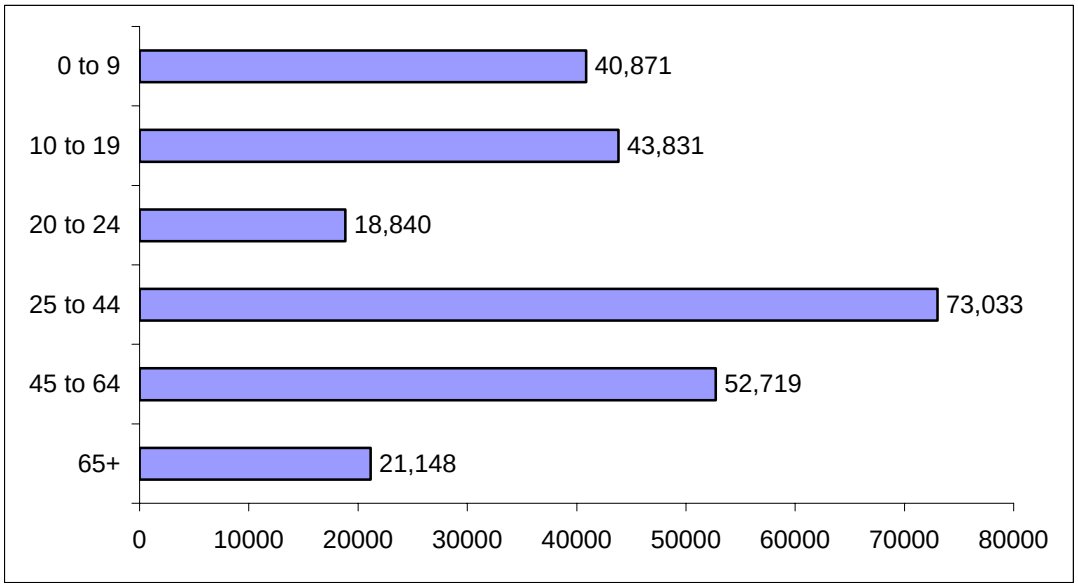
Source: US Census Bureau

Table A.2 Stanislaus population, by age group, 2005.



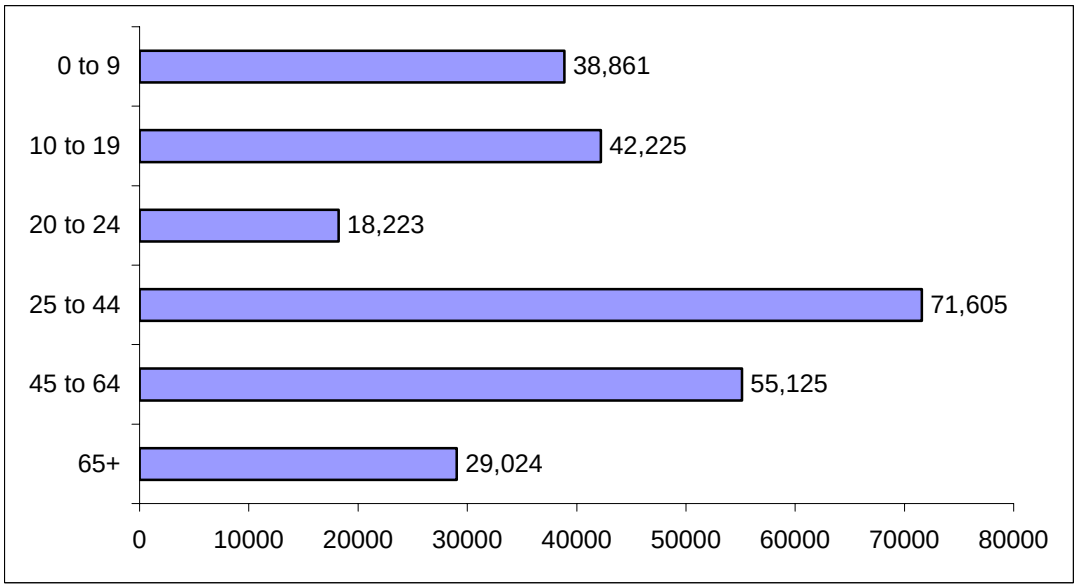
Source: US Census Bureau

Table A.3 Number of Males, by age category, in Stanislaus County, 2005



Source: US Census Bureau

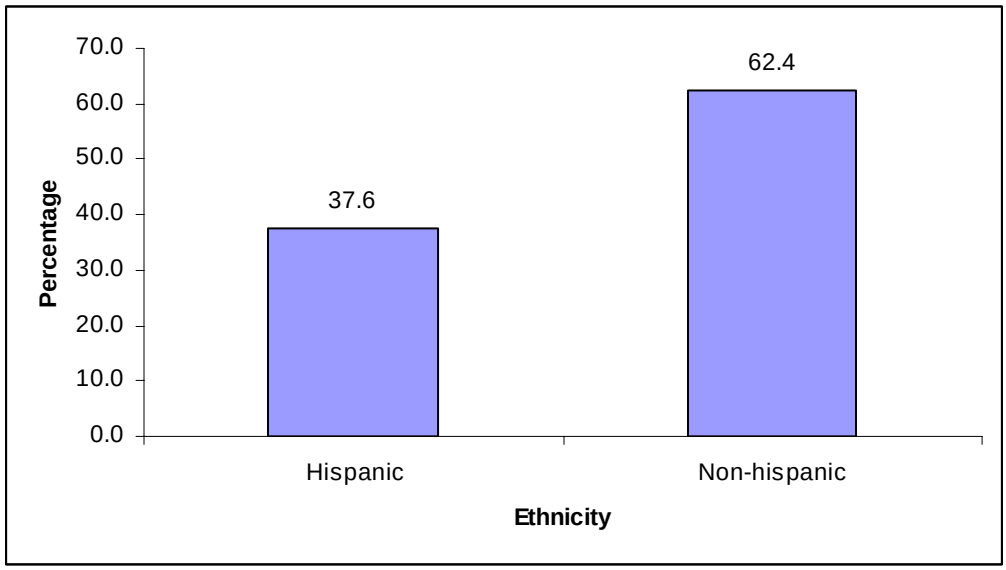
Table A.4 Number of Females, by age category, in Stanislaus County, 2005



Source: US Census Bureau

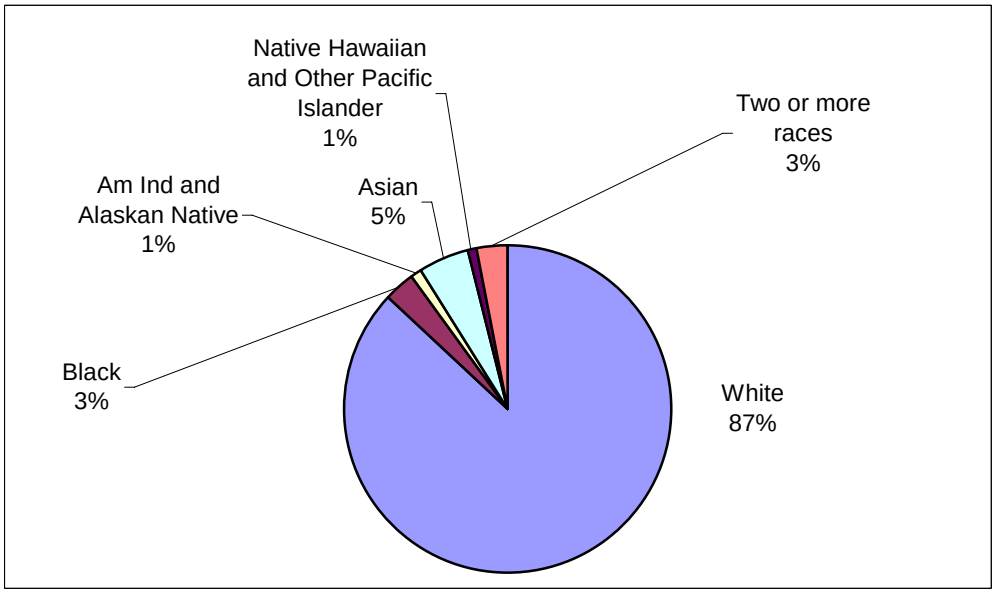
APPENDIX B: DISTRIBUTION BY RACE/ETHNICITY

Table B.1 Distribution of Hispanics and Non-Hispanics in Stanislaus, 2005



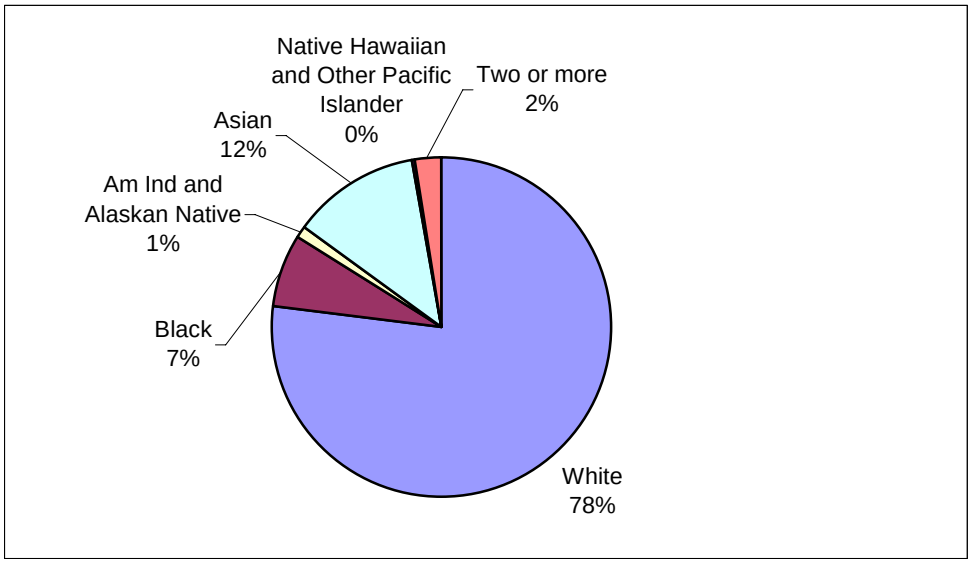
Source: US Census Bureau

Table B.2 Racial distribution of Stanislaus County Residents, 2005



Source: US Census Bureau

Table B.3 Racial Distribution for Californian population, 2005



Source: US Census Bureau

APPENDIX C: HOUSEHOLD COMPOSITION; ECONOMICS; EDUCATION

C.1 Household Composition

The composition of households in Stanislaus County is similar to that of the state. Stanislaus had a total of 158,000 households; 86,000 were two-parent families (54.5%), 9,000 (5.70%) were single-male headed families and 22,000 (13.9%) were single-female headed families. The average size of the family was 3.6.

At the state level, 50% of the households were two-parent families, 5.9% were single-male headed families and 12.9% were single-female headed families. The average size of the family was 3.5.

Table C.2 Employment Status, Stanislaus and California 2005

Employment Status	Stanislaus	State
In labor force	229678	17324829
Civilian labor force	229570	17244650
Employed	203187	16008544
Unemployed	26383	1236106
Armed Forces	108	80179
Not in labor force	136202	9362761

Source: US Census Bureau

Table C.3 Monthly Unemployment Rate for 2006

Month	Rate (CA)	Rate (Stanislaus)
Jan	5.3	8.4
Feb	5.4	8.7
Mar	5	8.7
Apr	4.8	8.5
May	4.6	7.6
June	4.9	8.3
July	5.1	7.9
Aug	4.9	6.8
Sept	4.6	6.4
Oct	4.2	6.3
Nov	4.5	7.3
Dec	4.6	7.6

(Source: 1. State of California, Employment Development Department. 2. California Employment Development Department
Labor Market Information Division Local Area Unemployment Statistics (LAUS) Program)

Table C.4 Percentage of grade 12 dropouts by ethnic group, Stanislaus and California. 2004-2005

Ethnic Group	Stanislaus % drop out	California % drop out
American Indian	11.5	9.1
Asian	9.5	2.7
Pacific Islander	8.3	7.6
Filipino	6.0	3.3
Hispanic	11.3	8.3
African American	11.2	10.1
White	7.1	4.0
Mult/No resp	3.5	6.9
County total (%)	9.0	
State total (%)	6.1	

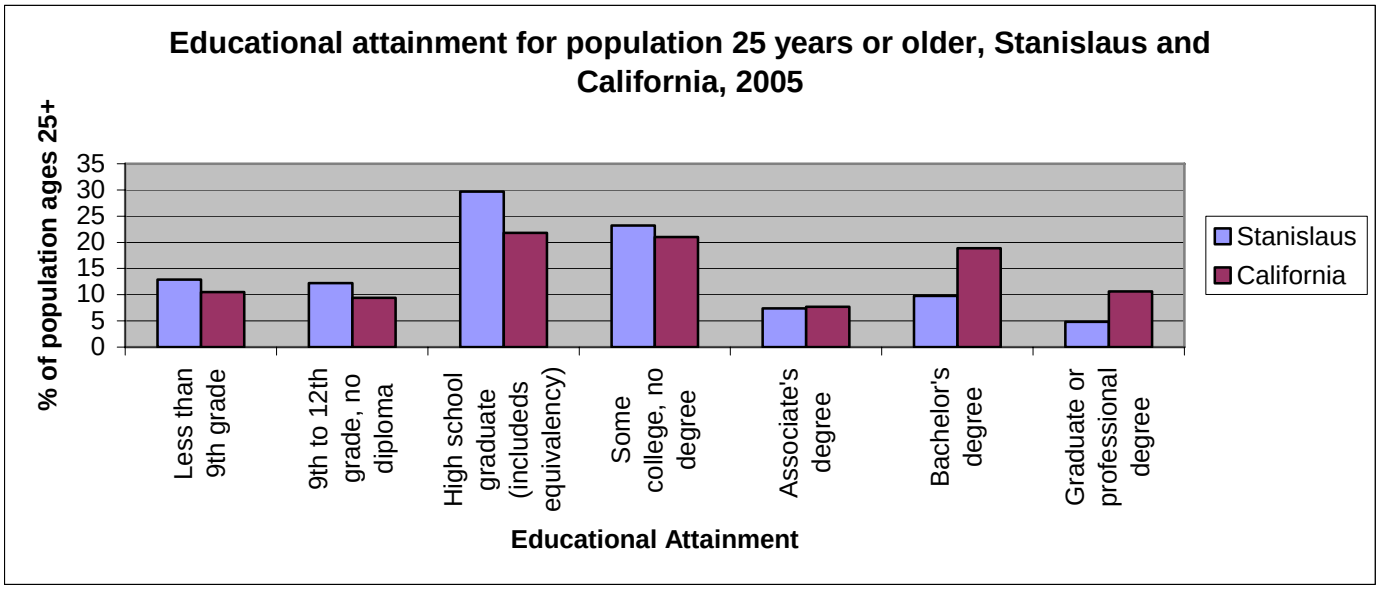
(Source: California Department of Education, for drop out rates)

Table C.5 One year drop out rate (9-12), 2004-2005. Stanislaus and California

Race/Ethnic group	Stanislaus	California
American Indian	4.9	4.3
Asian	3.4	1.3
Pacific Islander	5.4	3.7
Filipino	4.6	1.6
Hispanic	5.7	4.0
African American	6.2	5.4
White	3.7	2.0
Mult/No response	2.5	3.8
County total	4.6	
State total	3.1	

One year rate formula: (Gr9-12 drop outs/Gr9-12 enrollment) *100

Table C.6



In 2005, 30% of people 25 years or older had at least graduated from high school in Stanislaus County, compared to 22% for California. Fifteen percent of people 25 years and over in Stanislaus had a bachelor's degree or higher, in contrast to 30% for the state.

(Source: US Census Bureau, for Educational Attainment for Population 25yrs and older)

APPENDIX D: OVERALL FERTILITY RATE

General fertility rate is defined as the number of live births per 1000 women of childbearing age, 15- to 44- years of age.

According to the California Department of Health Services, Center for Health Statistics, the general fertility rate for Stanislaus in 2004 was 73.2 per 1000, compared to the State rate of 69.3 per 1000. In Stanislaus, birth rate was highest amongst women 25- to 29- years of age, at 138.8 per 1000, compared to the State rate of 118.4 per 1000. Stanislaus also had a higher general fertility rate than California.

General Fertility Rate and Birth Rate by Age of Mother, California and Stanislaus, 2004

		Birth Rate by Age of Mother							
	General Fertility Rate	<15	15-19	20-24	25-29	30-34	35-39	40-44	45+
CA	69.3	0.5	38.1	100.9	118.4	100.9	54.6	12.6	0.9
Stanislaus	73.2	0.4	45.6	114.0	138.8	98.1	43.6	7.5	0.7

Source: CA, DHS, Center for Health Statistics
http://www.dhs.ca.gov/hisp/chs/OHIR/tables/datafiles/vsofca/0230.xls

APPENDIX E: LEADING CAUSES OF DEATH BY RACE/ETHNICITY

Table E.1 Distribution of Hispanics for the leading causes of death in Stanislaus and California, 2004.

Disease	% Hispanics	
	Stanislaus	California
Atherosclerotic heart disease	7.6	11.0
Ischemic heart disease	8.8	12.1
Lung cancer	9.1	7.9
Chronic obstructive pulmonary disease	2.9	6.3
Stroke	16.7	11.3
Alzheimer	5.0	6.9

Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

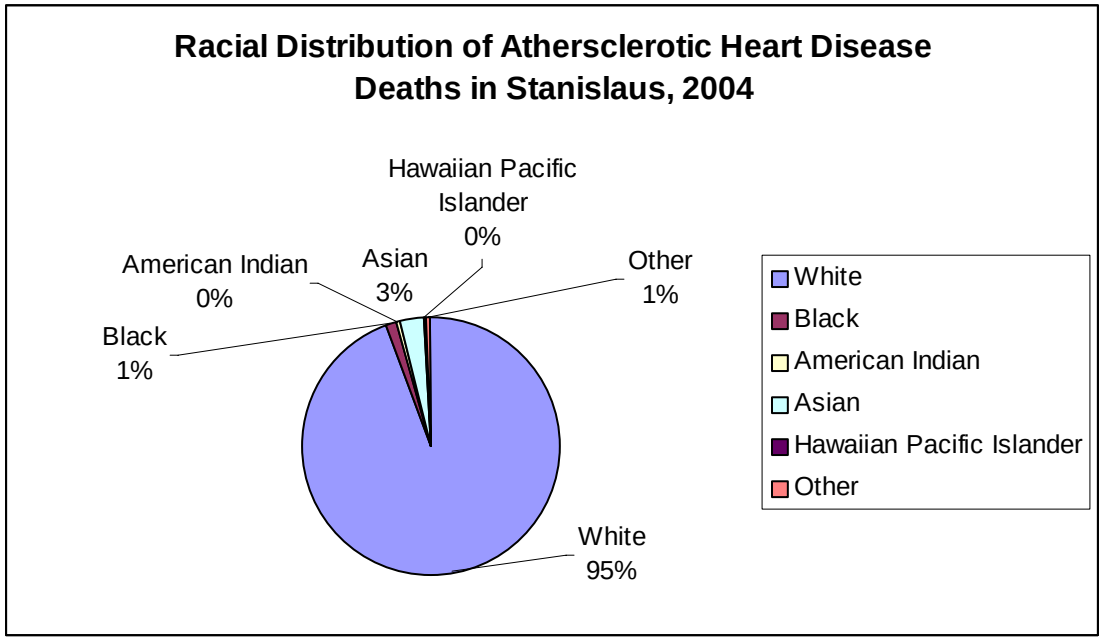
Table E.2 Distribution of Race for the leading causes of death in Stanislaus and California, 2004.

Disease	%White		% Black		% Am Ind		% Asian		% Hawaiian, Pacific Islander	
	Stan	CA	Stan	CA	Stan	CA	Stan	CA	Stan	CA
Atherosclerotic heart disease	94.5	86.5	1.3	6.2	0.2	0.4	3.1	6.2	0.4	0.2
Ischemic heart disease	89.2	84.4	3.6	7.4	0.8	0.4	4.4	6.9	0	0.3
Lung cancer	93	83.6	3.9	7.5	0.9	0.4	1.3	7.7	0.4	0.3
Chronic obstructive pulmonary disease	93.6	89.8	1.2	4.8	1.2	0.4	1.7	3.4	0.6	0.1
Stroke	96.7	83.4	0.8	7.5	0	0.3	2.5	8.1	0	0.2
Alzheimer	96.0	91.0	1.0	5.1	0	0.2	2.0	3.3	0	0.0

Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

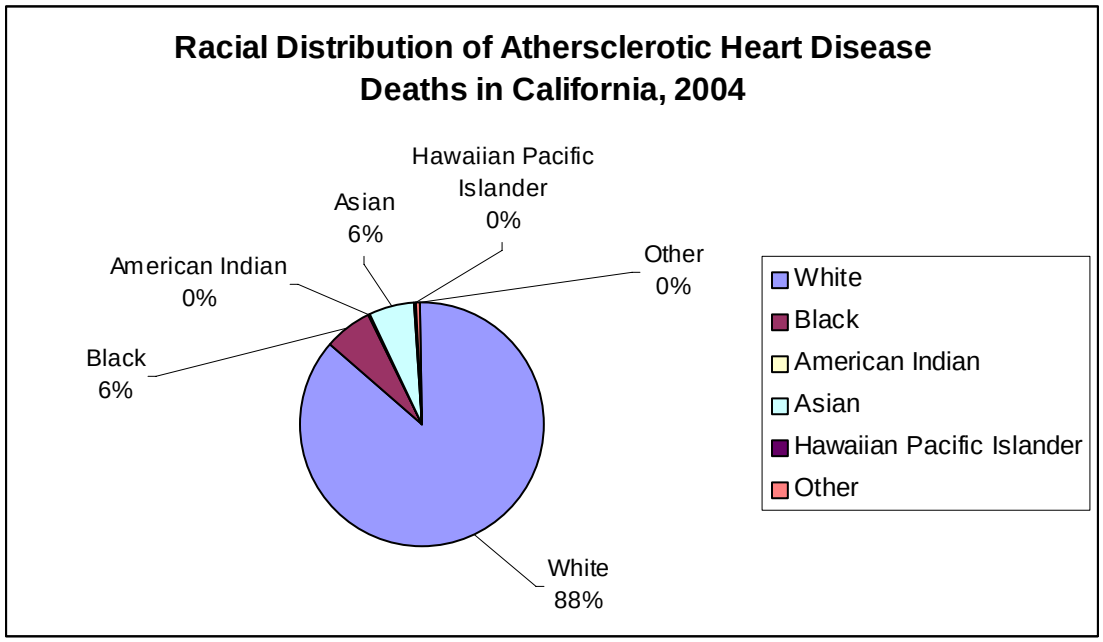
A higher percentage of Blacks (6%) died from Athersclerotic heart disease in California than in our county (1%).

Table E.3



Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

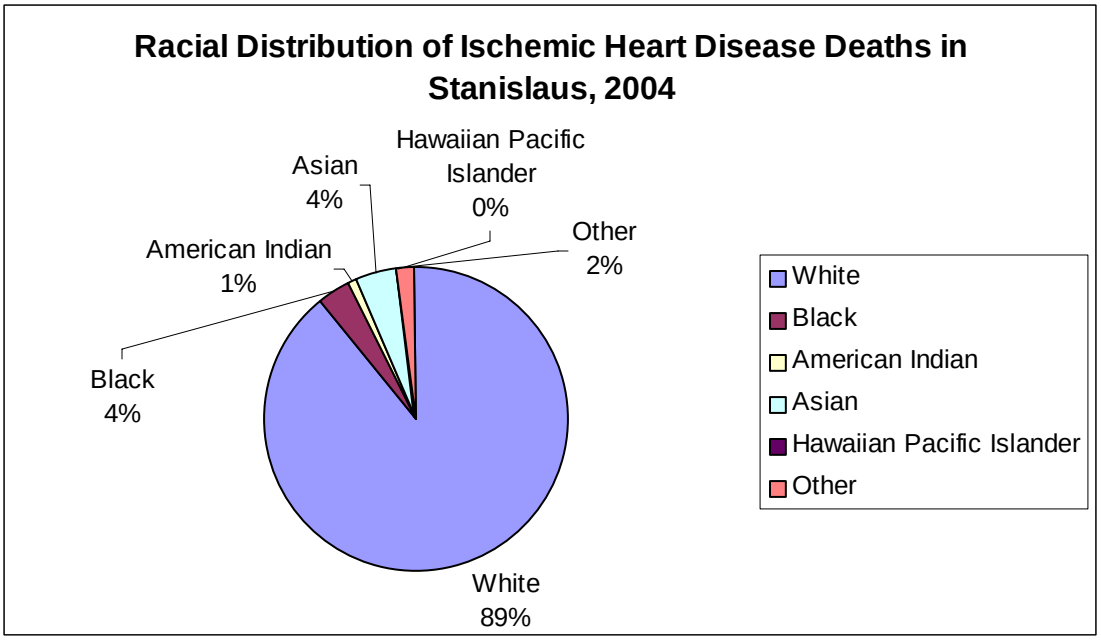
Table E.4



Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

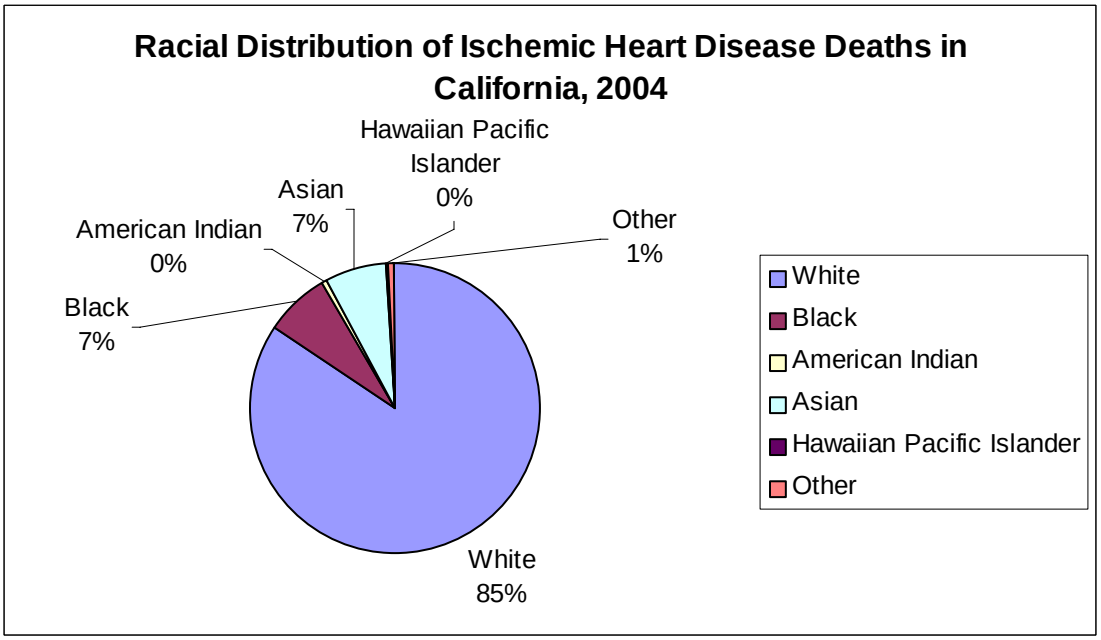
A higher percentage of Whites (89%) in Stanislaus died from Ischemic heart disease compared to 85% in California.

Table E.5



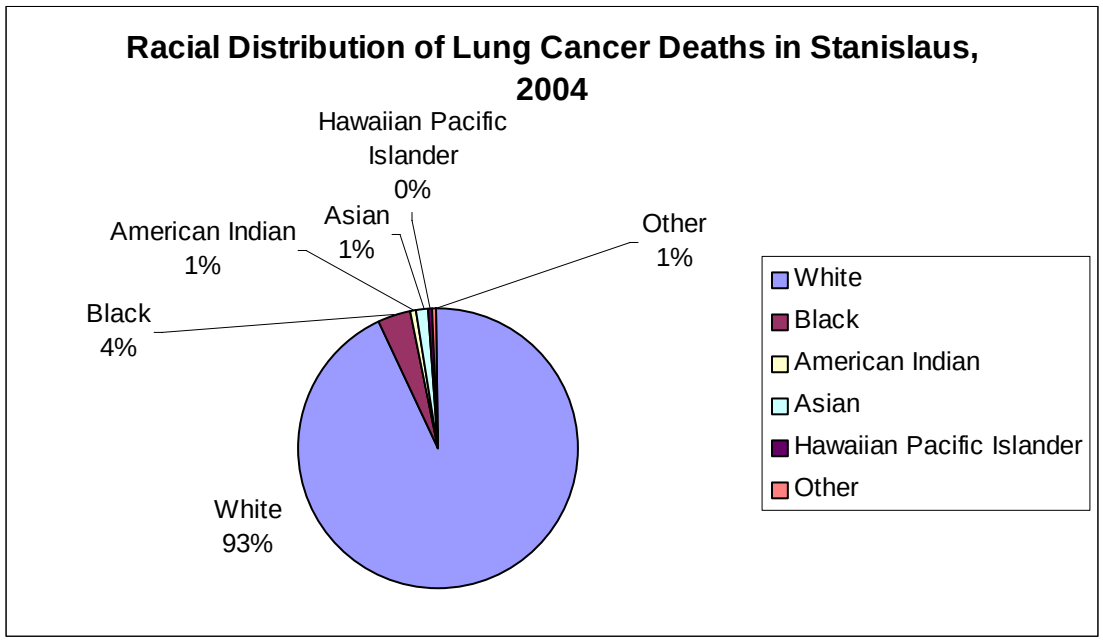
Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

Table E.6



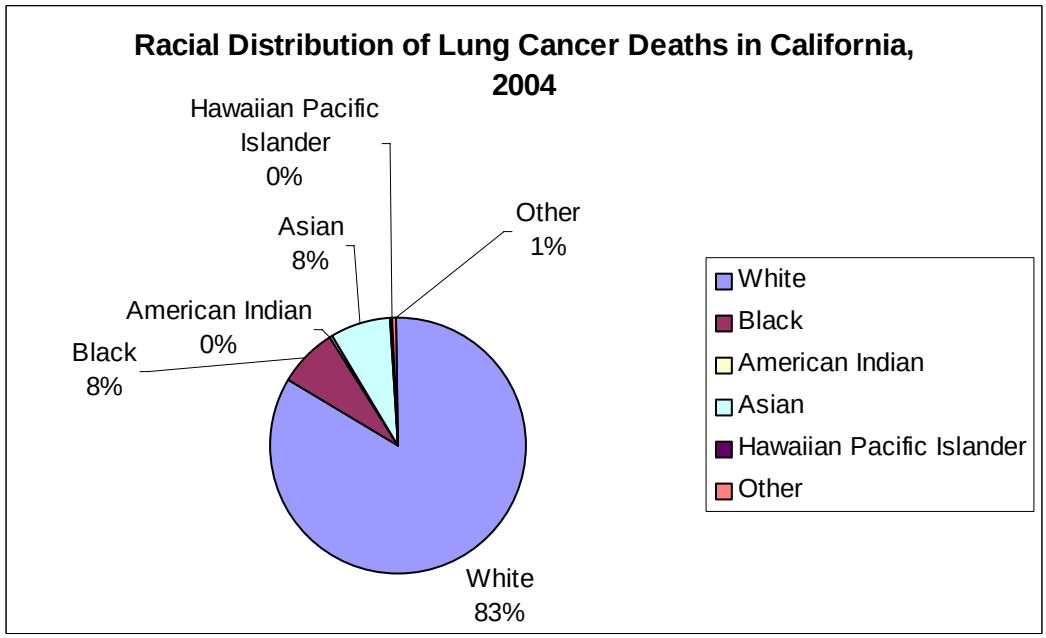
Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

A higher percentage of Whites (93%) in Stanislaus died from lung cancer compared to 83% in California. A lower percentage of Blacks (4%) in Stanislaus died from lung cancer.
Table E.7



Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

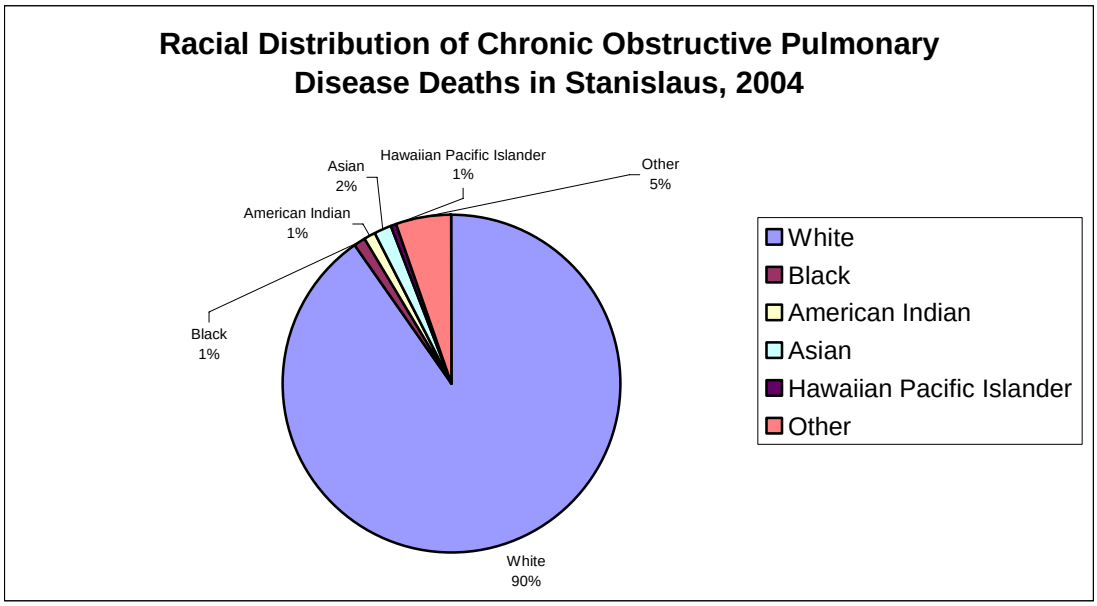
Table E.8



Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

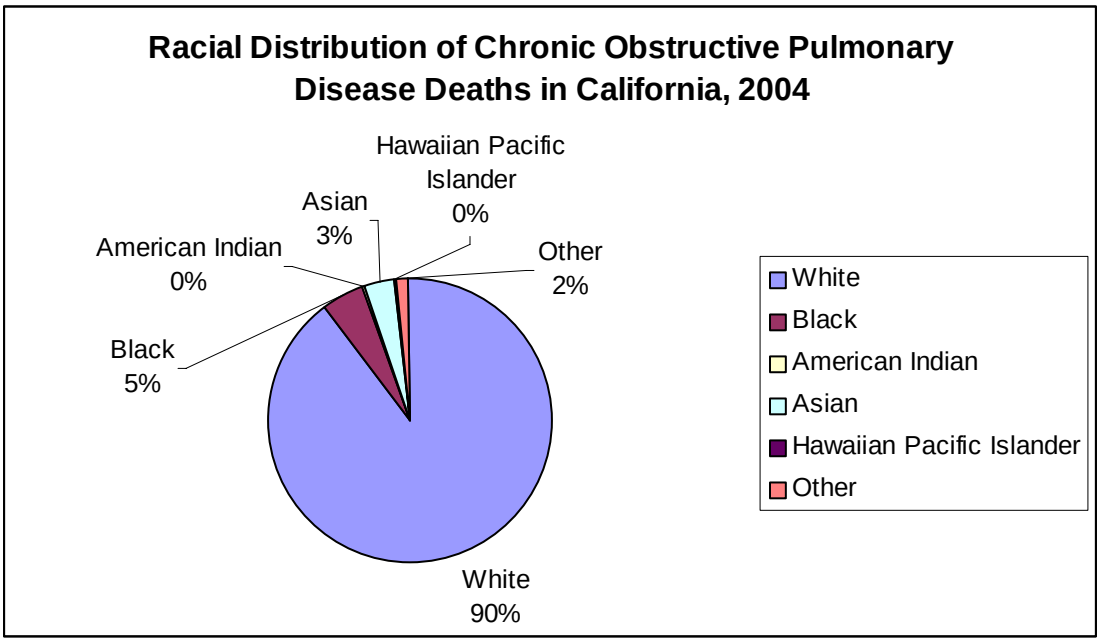
Five percent of blacks in California died from chronic obstructive pulmonary disease compared to one percent in Stanislaus.

Table E.9



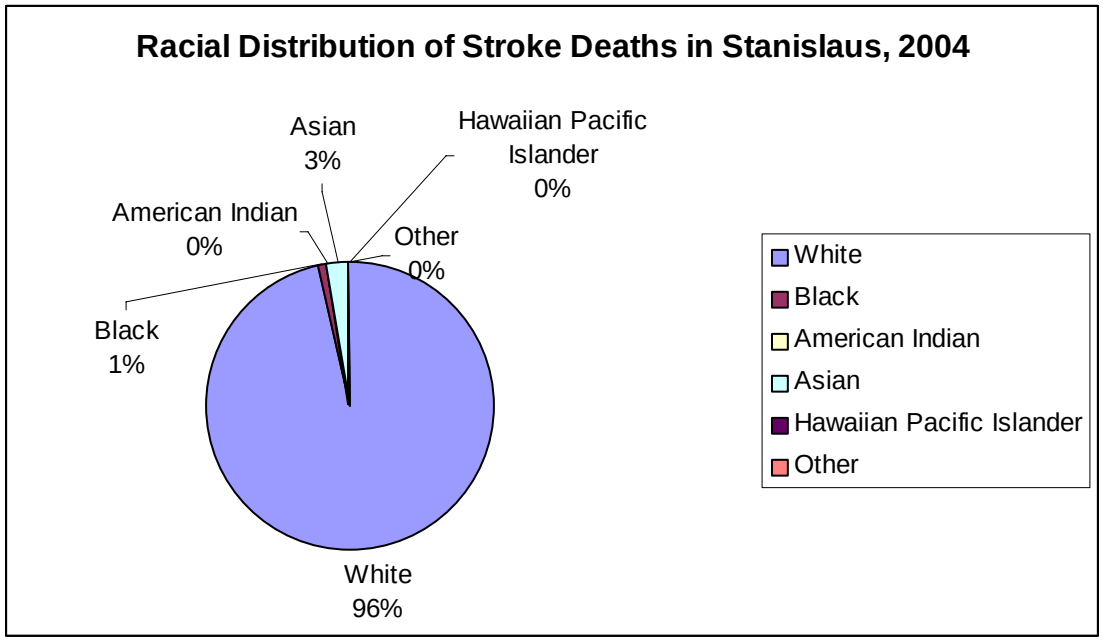
Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

Table E.10



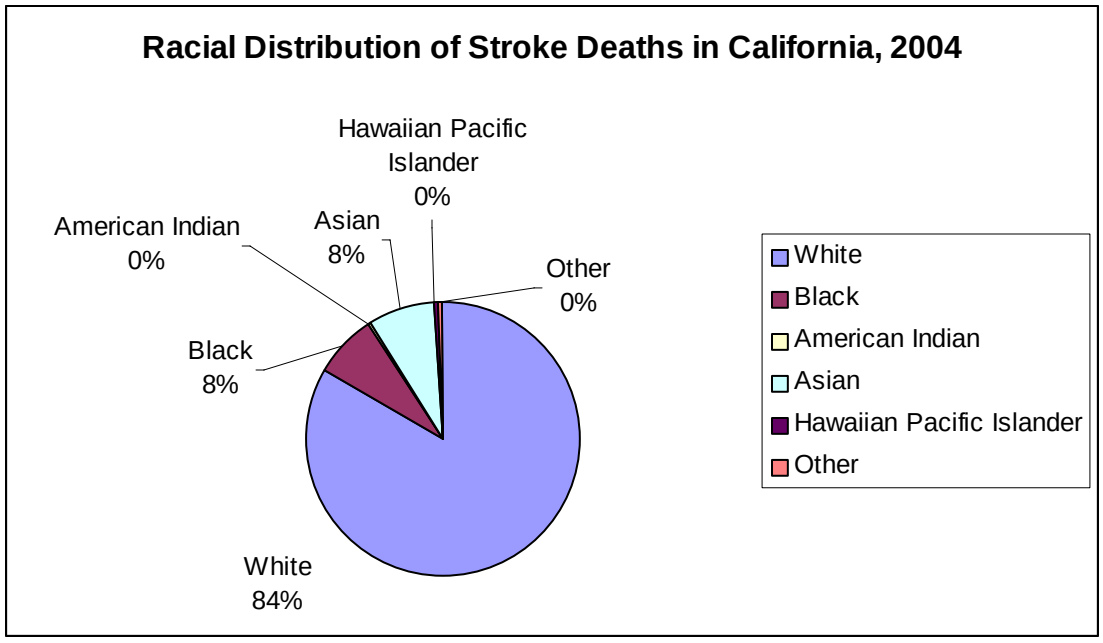
Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

Table E.11



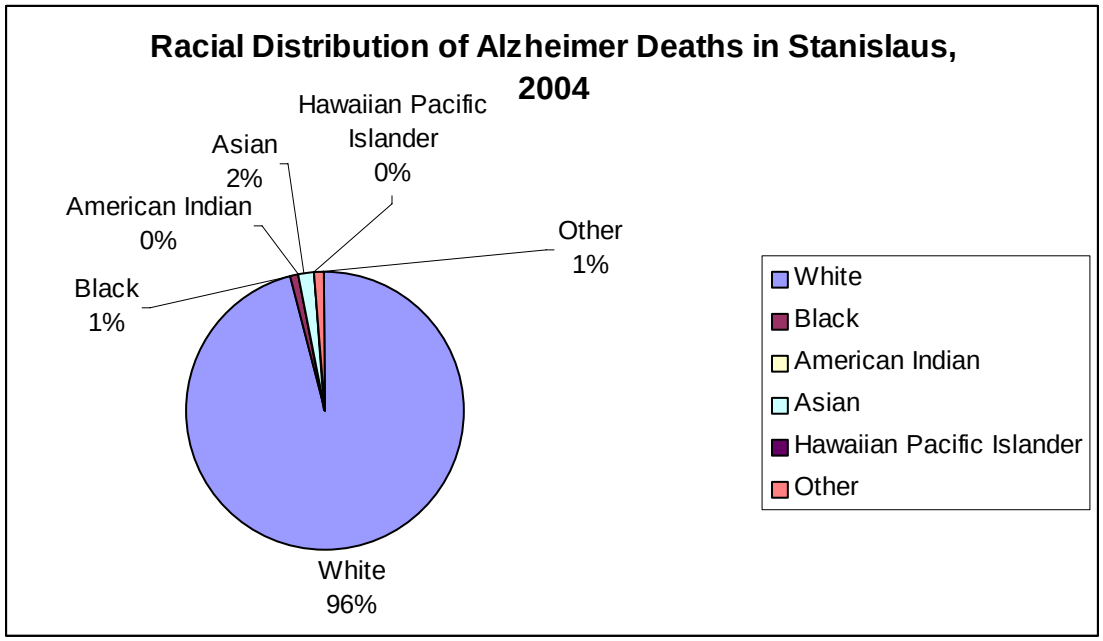
Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

Table E.12



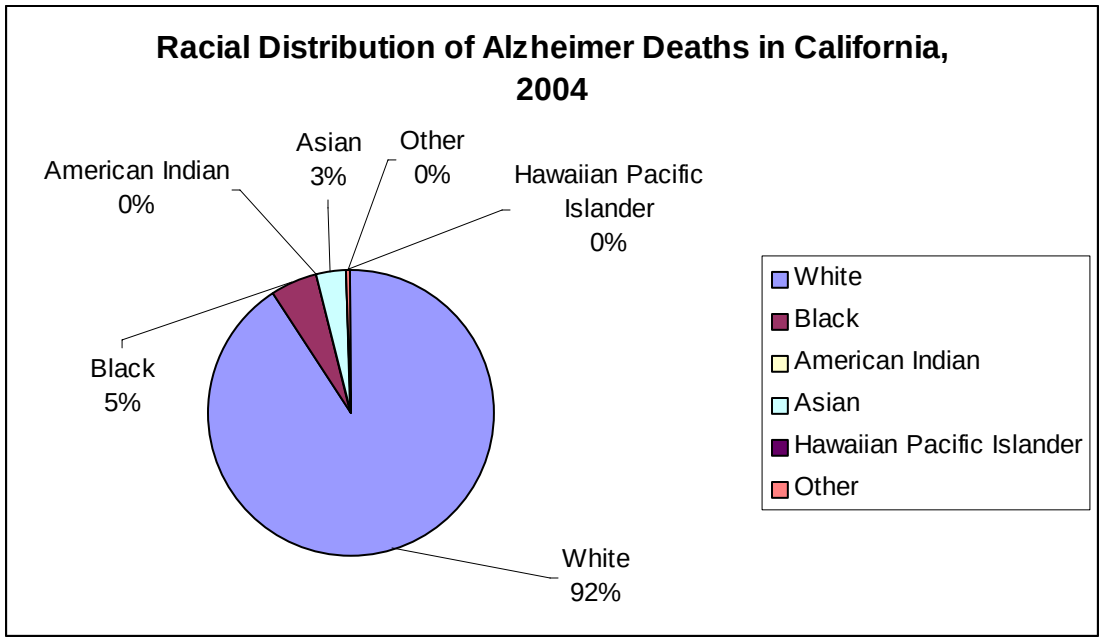
Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

Table E.13



Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

Table E.14



Source: California Department of Heath Services, Center for Health Statistics, Death Statistical Master File. 2004

APPENDIX F: TEEN BIRTHS & COSTS BY CALIFORNIA COUNTIES (2004) & TEEN BIRTHS BY AGE AND ZIP CODE OF RESIDENCE FOR ALLBIRTHS, STANISLAUS COUNTY, 2005

Teen Births & Costs by California Counties (2004)*

COUNTIES	Teen Births	Teen Birth Rate (per 1000)	Teen Birth Rate Rank	Est'd Annual Taxpayer Costs	Est' Annual Societal Costs
Alameda	1,239	26.6	19	$38,000,000	$84,000,000
Alpine	0	0	1	$0	$0
Amador	29	26.7	20	$880,000	$2,000,000
Butte	253	30.1	26	$7,700,000	$17,000,000
Calaveras	37	24.6	16	$1,100,000	$2,500,000
Colusa	39	46.2	44	$1,200,000	$2,600,000
Contra Costa	818	23.4	12	$25,000,000	$55,000,000
Del Norte	42	41.2	40	$1,300,000	$2,800,000
El Dorado	121	19	6	$3,700,000	$8,200,000
Fresno	2,226	62.8	52	$68,000,000	$150,000,000
Glenn	50	43.2	42	$1,500,000	$3,400,000
Humboldt	150	31.2	27	$4,600,000	$10,000,000
Imperial	432	67.5	55	$13,000,000	$29,000,000
Inyo	20	28.1	22	$610,000	$1,400,000
Kern	1,997	68.2	56	$61,000,000	$140,000,000
Kings	357	72.6	57	$11,000,000	$24,000,000
Lake	83	37.5	33	$2,500,000	$5,600,000
Lassen	43	44.5	43	$1,300,000	$2,900,000
Los Angeles	14,345	41.2	41	$440,000,000	$970,000,000
Madera	332	64.3	54	$10,000,000	$22,000,000
Marin	84	13.1	3	$2,600,000	$5,700,000
Mariposa	14	26.2	18	$430,000	$950,000
Mendocino	125	38.4	35	$3,800,000	$8,500,000
Merced	559	53.8	49	$17,000,000	$38,000,000
Modoc	7	28.9	24	$210,000	$470,000
Mono	6	20.6	8	$180,000	$410,000
Monterey	826	55.5	50	$25,000,000	$56,000,000
Napa	124	27.3	21	$3,800,000	$8,400,000
Nevada	59	18.2	5	$1,800,000	$4,000,000
Orange	3,126	32.7	29	$95,000,000	$210,000,000
Placer	181	17.3	4	$5,500,000	$12,000,000
Plumas	15	22.6	11	$460,000	$1,000,000
Riverside	3,183	46.4	45	$97,000,000	$220,000,000
Sacramento	1,869	39.2	36	$57,000,000	$130,000,000
San Benito	86	39.6	37	$2,600,000	$5,800,000
San Bernardino	3,819	50	47	$120,000,000	$260,000,000
San Diego	3,768	37.6	34	$110,000,000	$260,000,000
San Francisco	310	20.6	9	$9,400,000	$21,000,000
San Joaquin	1,315	52.2	48	$40,000,000	$89,000,000
San Luis Obispo	212	24.1	14	$6,400,000	$14,000,000
San Mateo	454	22.1	10	$14,000,000	$31,000,000

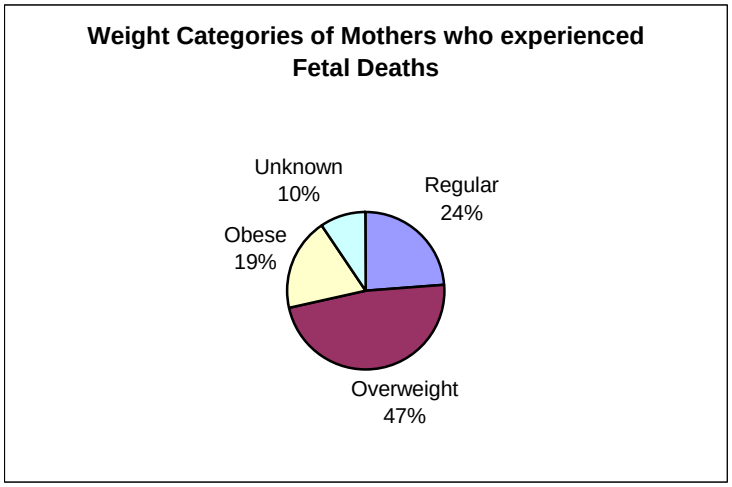
Santa Barbara	617	40.9	39	$19,000,000	$42,000,000
Santa Clara	1,373	26.1	17	$42,000,000	$93,000,000
Santa Cruz	339	31.8	28	$10,000,000	$23,000,000
Shasta	239	34.2	32	$7,300,000	$16,000,000
Sierra	0	0	2	$0	$0
Siskiyou	55	33	30	$1,700,000	$3,700,000
Solano	459	29.8	25	$14,000,000	$31,000,000
Sonoma	475	28.1	23	$14,000,000	$32,000,000
Stanislaus	978	47.6	46	$30,000,000	$66,000,000
Sutter	130	40.1	38	$3,900,000	$8,800,000
Tehama	111	56	51	$3,400,000	$7,500,000
Trinity	7	20.3	7	$210,000	$470,000
Tulare	1,245	74.5	58	$38,000,000	$84,000,000
Tuolumne	45	24.5	15	$1,400,000	$3,000,000
Ventura	981	33.3	31	$30,000,000	$66,000,000
Yolo	214	24	13	$6,500,000	$14,000,000
Yuba	163	63.4	53	$4,900,000	$11,000,000

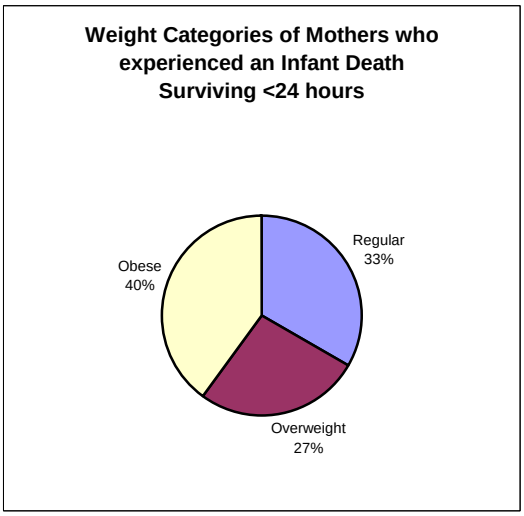
*Public Health Institute Table

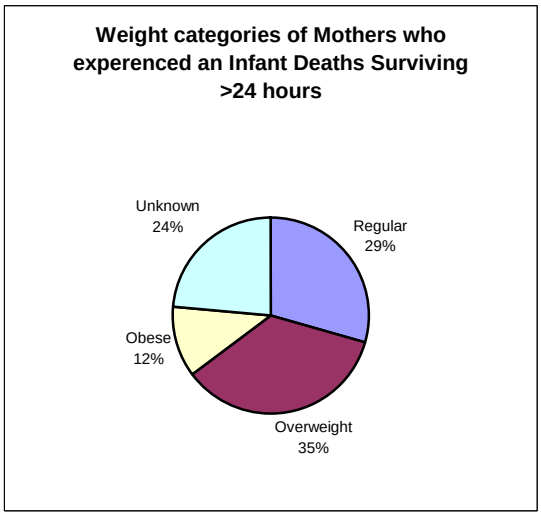
Teen Births by Age and Zip Code of Residence for all Births, Stanislaus County, 2005

	Mother's Age							Total
MZIP	13	14	15	16	17	18	19	
95307	0	0	9	10	6	27	35	87
95313	0	0	0	0	1	0	2	3
95316	0	0	1	2	1	2	5	11
95319	0	1	0	1	1	0	2	5
95323	0	0	0	0	1	0	0	1
95326	0	0	0	0	1	5	4	10
95328	0	0	0	0	3	1	7	11
95350	0	1	5	8	13	24	37	88
95351	2	3	8	20	35	44	59	171
95354	0	1	0	9	13	17	26	66
95355	0	1	1	5	10	20	31	68
95356	0	1	1	4	3	7	21	37
95357	0	0	1	1	8	4	14	28
95358	0	2	4	14	18	29	19	86
95360	0	0	1	2	2	4	8	17
95361	0	0	2	4	5	10	18	39
95363	0	0	0	3	11	11	13	38
95367	0	0	0	6	13	10	12	41
95368	0	0	0	2	2	6	9	19
95380	0	1	5	16	19	29	29	99
95382	0	0	0	3	8	3	8	22
95386	0	0	0	4	1	5	7	17
95387	0	0	0	0	0	3	1	4
Total	2	11	38	114	175	261	367	968

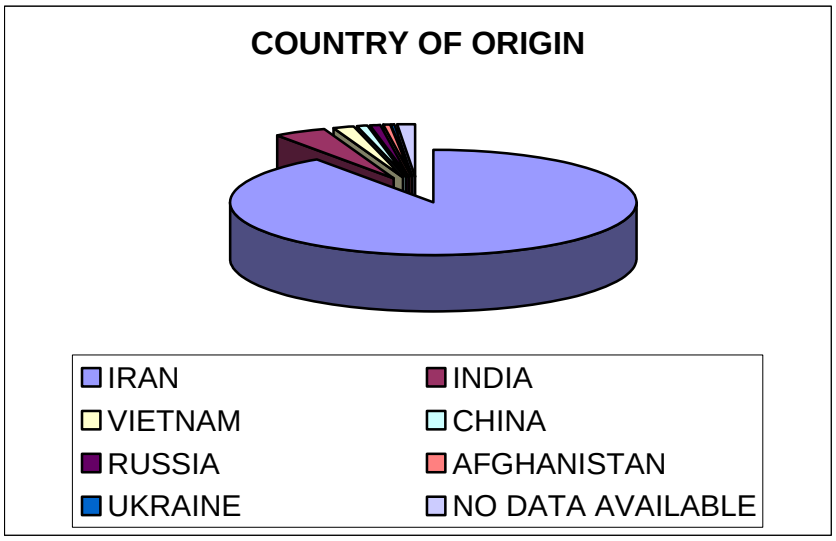
APPENDIX G: FETAL AND INFANT MORTALITY STUDY GRAPHS







APPENDIX H: REFUGEE HEALTH PROGRAM STATISTICS



OCTOBER 1, 2005 – SEPTEMBER 30, 2006

Arrivals: State – County

	STATE	%	STANISLAUS	%
ARRIVALS	8599		234	2.72%
HEALTH ASSESSMENT PROVIDED	6642	77.242%	228	97.436%
MOVED/UNABLE TO CONTACT	1957	0.228%	6	0.026%
MALE	4212	48.982%	110	47.009%
FEMALE	4387	51.018%	124	52.991%
Child (0 - 20)	3769	43.831%	48	20.513%
Adult	4830	56.169%	186	79.487%

Health Conditions of Arriving Refugees

HEALTH CONDITIONS		% of Physical Exams (PE)
ARRIVALS W/1 OR MORE REPORTED HEALTH CONDITION	197	86.40%
ARRIVALS WITH ONE OR MORE OF THE TOP 10 HEALTH CONDITIONS	154	67.54%

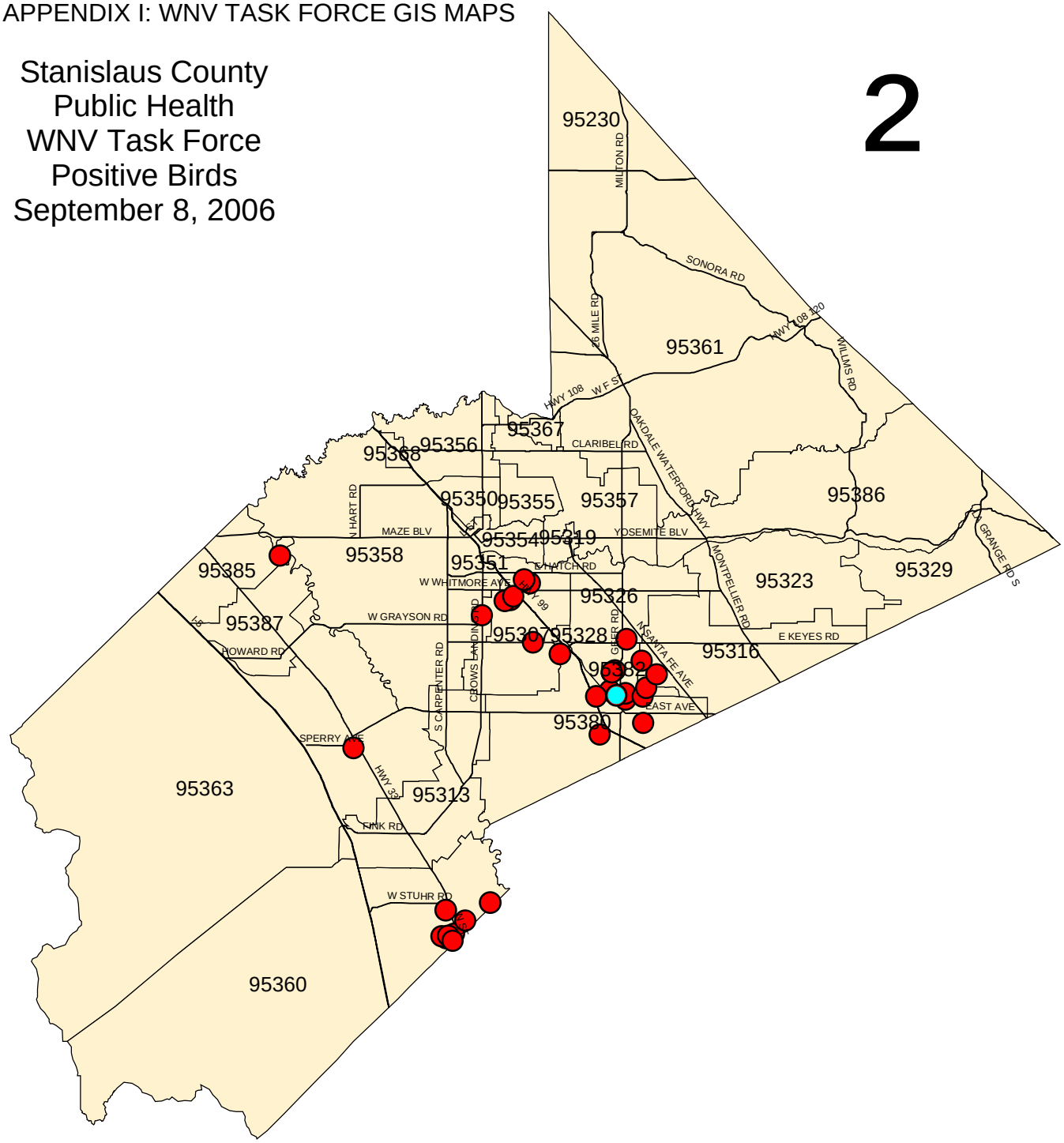
Top 10 Reported Health Conditions

HEALTH CONDITIONS/DIAGNOSES OF REFUGEES (2005-2006)	Total Clients	% of Arrivals w/Health Conditions	% Of All Physical Assessments (228)
Arrivals with 1 or more reported health condition	**197**	**100.00%**	**86.40%**
OBESITY	67	34%	29%
DENTAL CARIES	55	28%	24%
BLINDNESS OR POOR VISION	50	25%	22%
DISORDERS OF LIPOPROTEIN METABOLISM & OTHER LIPIDEMIAS	44	22%	19%
RESPIRATORY TUBERCULOSIS NOT CONFIRMED	40	20%	18%
ESSENTIAL HYPERTENSION	38	19%	17%
MENTAL OR BEHAVORIAL DISORDERS DUE TO USE OF TOBACCO	35	18%	15%
HEARING LOSS	31	16%	14%
(OTHER PROTOZOAL) INTESTINAL DISEASES	28	14%	12%
(UNSPECIFIED) DIABETES MELLITUS	25	13%	11%

APPENDIX I: WNV TASK FORCE GIS MAPS

Stanislaus County
Public Health
WNV Task Force
Positive Birds
September 8, 2006

2



Birds Tested Positive for WNV

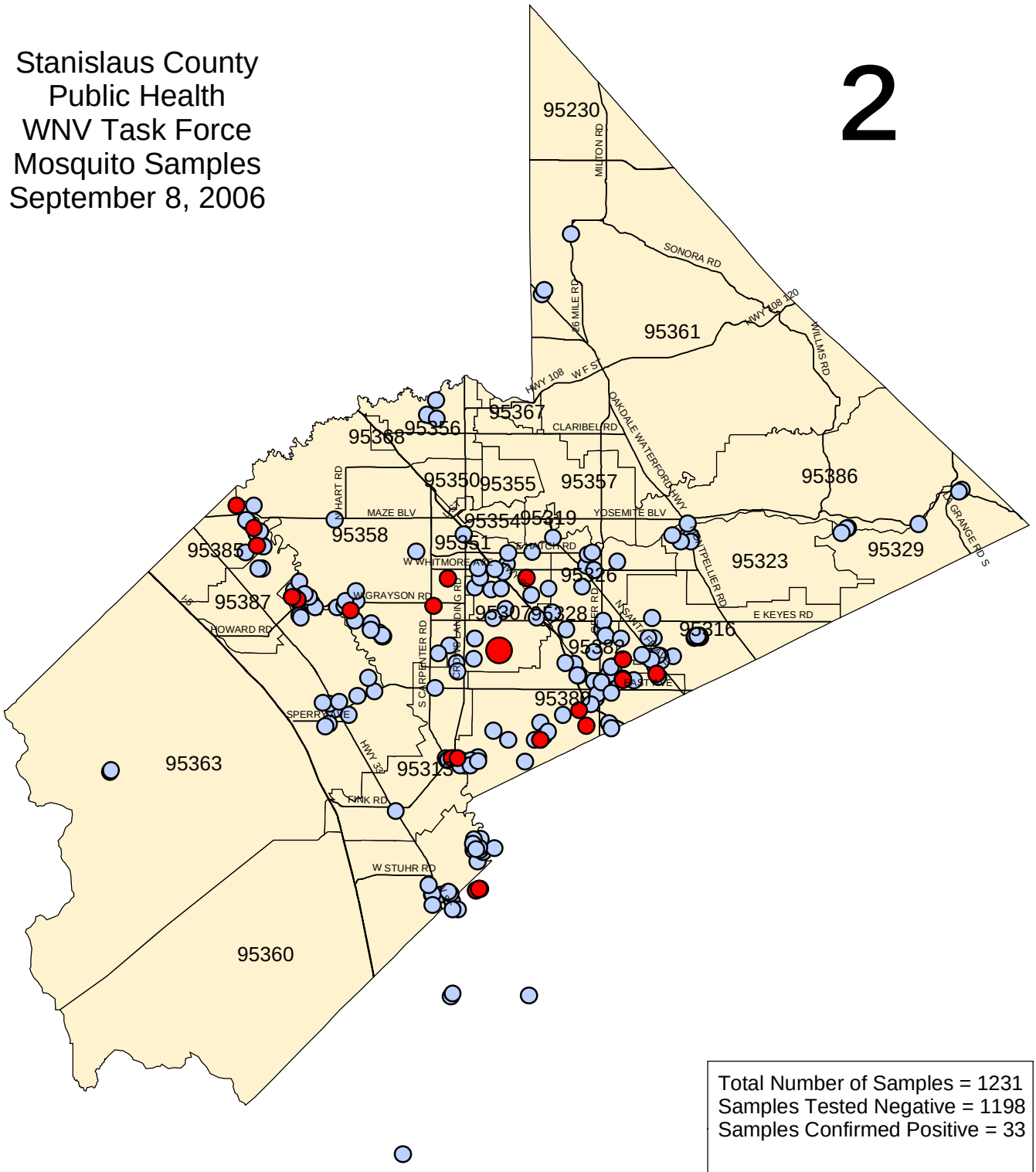
Positive Birds

33 Positive

Miles
0 2 4 8 12 16 20 24

Stanislaus County
Public Health
WNV Task Force
Mosquito Samples
September 8, 2006

2



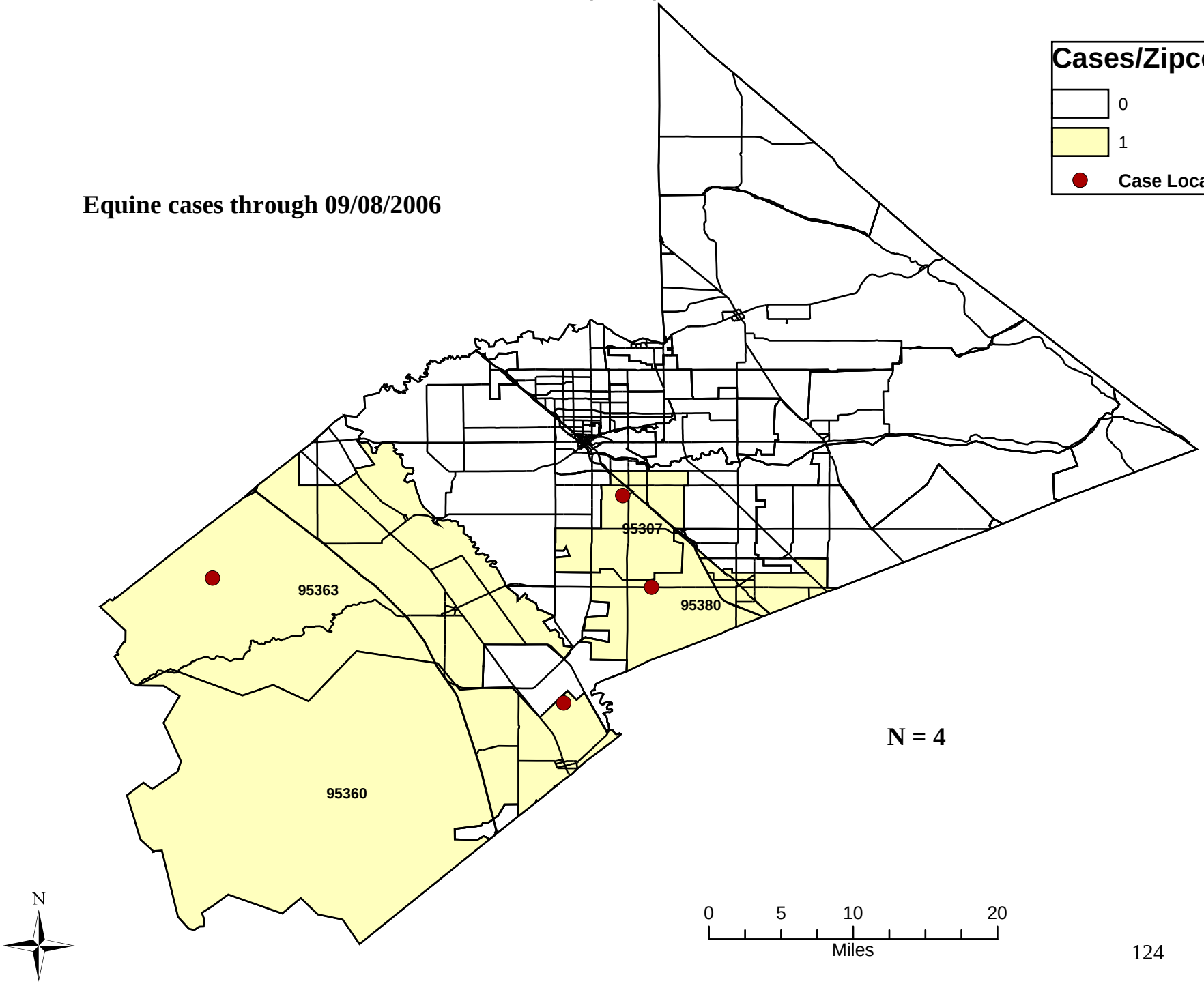
Total Number of Samples = 1231
Samples Tested Negative = 1198
Samples Confirmed Positive = 33

Mosquito Samples

- 1 - 2 Confirmed Tests
- 3 Confirmed Tests
- 4 Confirmed Tests
- 234 Test Sites

Miles
0 2 4 8 12 16 20 24

Stanislaus County Equine WNV Cases, 2006



APPENDIX J

Communicable Disease Trend Summary, 2000-2006
Stanislaus County Public Health Department

Disease	2000	2001	2002	2003	2004	2005	2006
HIB	0	0	0	1	0	0	0
Measles	0	0	0	0	0	0	0
Mumps	0	1	0	0	0	1	0
Pertussis	13	7	18	34	13	110	78
Rubella	0	1	0	0	0	0	0
Hepatitis A	105	57	5	14	17	11	7
Hepatitis B Acute	16	12	30	18	9	7	8
Hepatitis B Carriers	59	75	83	79	71	57	68
Hepatitis C Acute	69	80	87	66	51	4	0
Hepatitis C Carriers	602	523	584	491	482	556	457
T.B./pulmonary	16	15	19	17	15	12	12
T.B. extrapulmonary	2	3	2	2	4	1	4
PID	97	84	36	23	29	35	23
NGU	0	0	0	0	0	0	0
Gonorrhea	232	204	160	292	538	654	404
Syphilis/Prim,Sec	1	4	0	5	12	5	8
Syphilis/Latent/Cong	10	4	6	9	1	2	31
Chancroid	1	0	0	0	0	0	0
Chlamydia	1053	1267	1293	1568	1832	1968	1833
Amebiasis	8	6	5	1	1	2	0
Salmonellosis	67	87	56	72	78	79	71
Shigellosis	28	26	17	33	21	12	21
Campylobacteriosis	164	134	142	110	117	94	124
Giardiasis	24	43	31	34	8	33	25
Listeriosis	1	2	0	0	1	0	0
HUS	0	0	0	2	0	0	0
E-coli 0157:H7	8	11	11	6	5	9	8
Outbreaks (GI)*							18
Encephalitis	4	3	2	1	2	5	6
West Nile Virus-Fever	0	0	0	0	0	65	9
WNV-Asymptomatic	0	0	0	0	0	8	1
WNV-Meningitis	0	0	0	0	0	20	2
Meningitis-viral	74	78	67	148	84	54	38
Men/meningococcal	28	12	4	11	6	7	8
Men/other bacteria	15	8	11	9	9	14	13
Meningitis/Fungal	4	0	5	0	1	2	1
Coccidioidomycosis	4	3	10	20	21	14	18
Typhoid Fever	0	2	1	2	1	0	0
Legionellosis	1	1	0	1	1	0	0
Lyme Disease	2	4	0	0	0	1	0
Malaria	2	1	1	0	0	0	4
Kawasaki Syndrome	3	4	2	2	2	4	5
Cysticercosis	1	1	2	0	0	0	1
Cryptosporidiosis	1	0	0	0	0	0	0
Brucellosis	0	3	2	1	1	1	1
Botulism (foodborne)	0	0	0	0	0	0	0
Botulism (wound)	0	2	0	0	0	0	0
Botulism (infant)	2	0	0	0	0	1	3
Q Fever	0	0	2	0	0	2	1
Toxic Shock Synd.	0	2	1	1	1	0	0
Yersinia	2	1	0	2	0	2	2
Vibrio	1	2	0	1	1	2	0
Rabies,Animal	0	0	3	1	1	1	0

* New category

APPENDIX K: TEN ESSENTIAL PUBLIC HEALTH SERVICES

The Essential Services provide a working definition of public health and a guiding framework for the responsibilities of local public health systems.

1. **Monitor** health status to identify and solve community health problems.

2. **Diagnose and investigate** health problems and health hazards in the community.

3. **Inform, educate, and empower** people about health issues.

4. **Mobilize** community partnerships and action to identify and solve health problems.

5. **Develop policies and plans** that support individual and community health efforts.

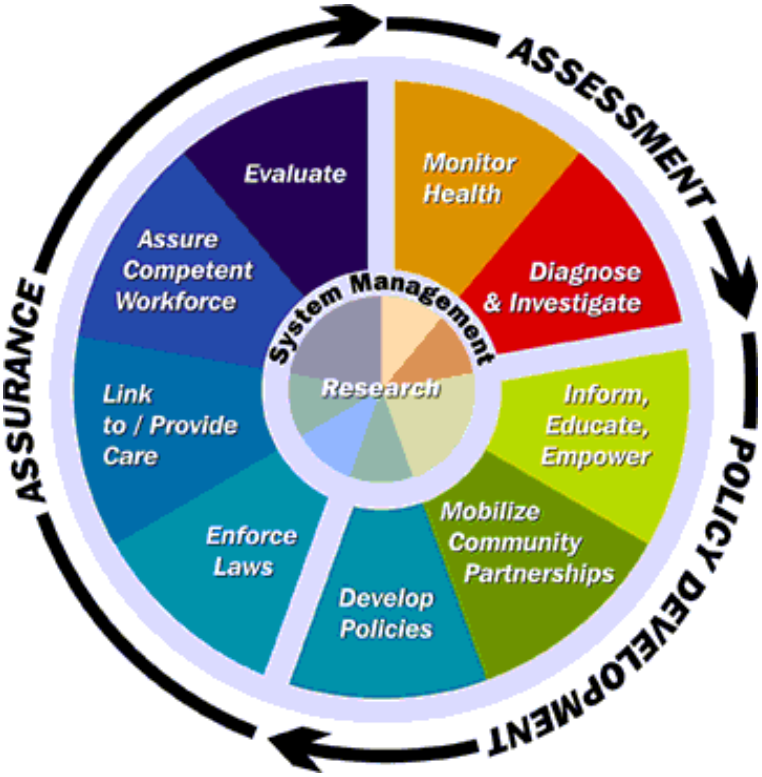
6. **Enforce** laws and regulations that protect health and ensure safety.

7. **Link** people to needed personal health services and assure the provision of health care when otherwise unavailable.

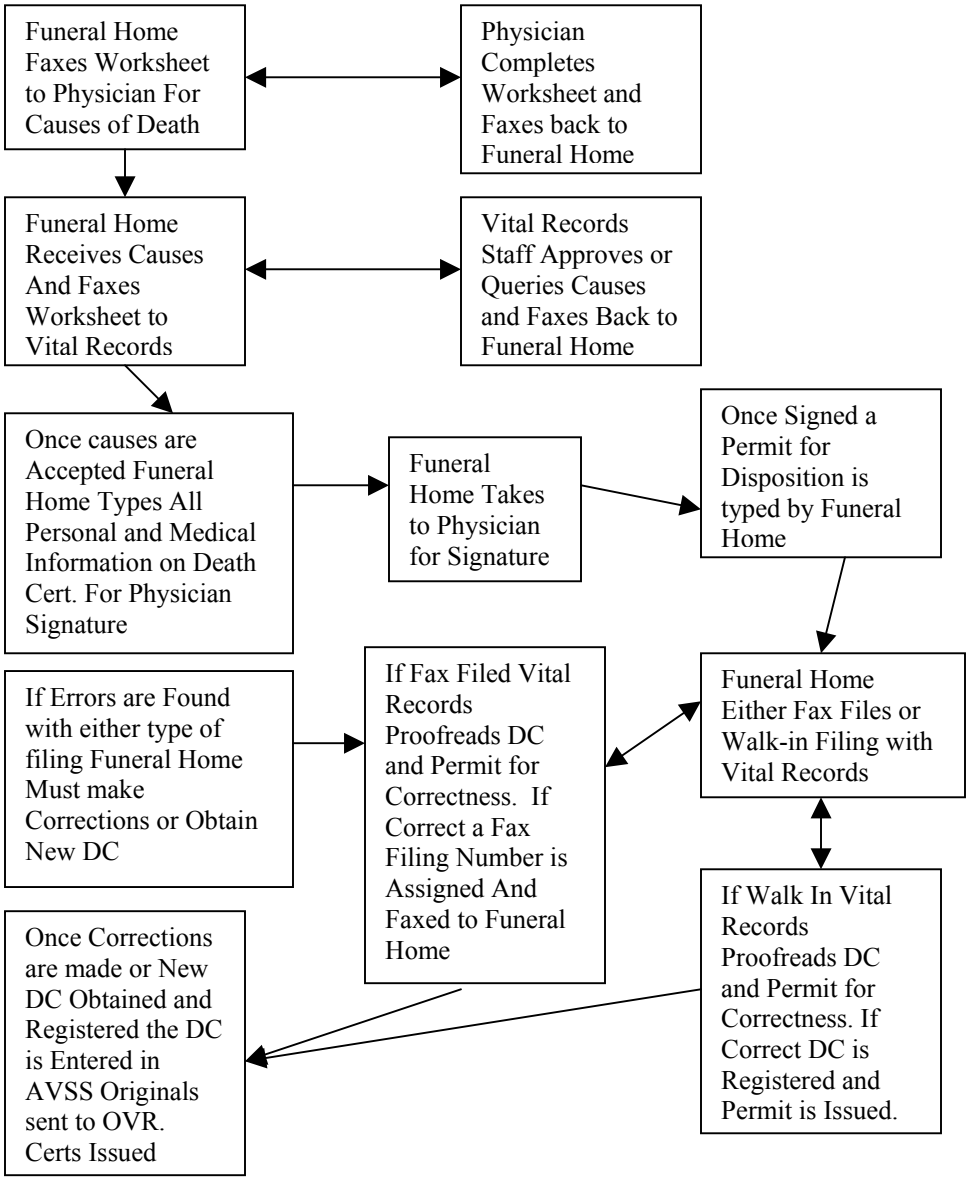
8. **Assure** competent public and personal health care workforce.

9. **Evaluate** effectiveness, accessibility, and quality of personal and population-based health services.

10. **Research** for new insights and innovative solutions to health problems.

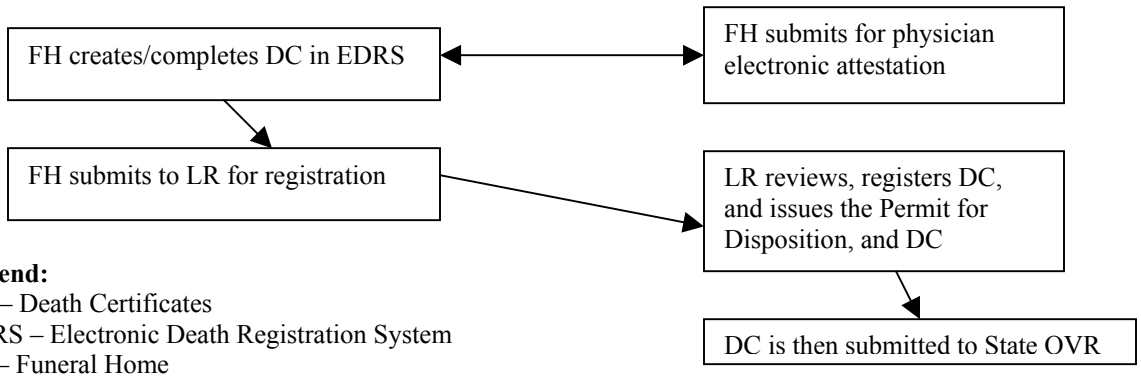


Non-EDRS – Electronic Death Registration System
Non-EDRS Death Certificate Flow Chart



Electronic Death Certificate
EDRS Flow Chart

All steps are performed electronically.



Legend:
DC – Death Certificates
EDRS – Electronic Death Registration System
FH – Funeral Home
LR – Local Registrar
OVR – Office of Vital Records

APPENDIX M: HEALTH STATUS PROFILE RANKING

Regional Health Status Ranking (Out of 58 Counties), 2006

HEALTH STATUS INDICATOR	Stanislaus	San Joaquin	Merced	Tuolumne
ALL CAUSES	48	53	49	38
MOTOR VEHICLE ACCIDENTS	29	27	44	53
UNINTENTIONAL INJURIES	34	28	37	53
FIREARM INJURIES	25	33	39	53
HOMICIDE	41	57	51	33
SUICIDE	30	23	16	55
ALL CANCERS	42	50	33	47
LUNG CANCER	46	50	16	42
FEMALE BREAST CANCER	45	46	55	47
CORONARY HEART DISEASE	56	57	52	30
CEREBROVASCULAR DISEASE	26	56	57	25
DRUG-RELATED DEATHS	51	43	13	56
DIABETES	46	55	57	14
HEPATITIS C INCIDENCE	2	30	40	54
AIDS INCIDENCE (AGE 13 AND OVER)	34	48	26	17
TUBERCULOSIS INCIDENCE	31	50	39	12
CHLAMYDIA INCIDENCE	42	51	47	15
SYPHILIS INCIDENCE	49	43	1	8
MEASLES INCIDENCE	8	7	17	33
INFANT DEATHS: ALL RACES	53	52	43	6
INFANT DEATHS: ASIAN/OTHER	23	32	48	12
INFANT DEATHS: BLACK	34	56	36	17
INFANT DEATHS: HISPANIC	48	47	46	39
INFANT DEATHS: WHITE	56	46	34	8
LOW BIRTHWEIGHT INFANTS	38	46	37	3
LATE OR NO PRENATAL CARE	21	52	58	7
ADEQUATE/ADEQUATE PLUS CARE	47	55	58	22
BIRTHS TO MOTHERS AGED 15-19	46	49	50	15
BREASTFEEDING INITIATION	48	49	43	24
PERSONS UNDER 18 IN POVERTY	36	38	54	24

Rank within 58 California Counties
1 = Best
58 = Worst

APPENDIX N

CDC Preparedness Goals

(As stated in the state and local Cooperative Agreement Guidance for Public Health Emergency Preparedness.)

Prevent:
1) Increase the use and development of interventions known to prevent human illness from chemical, biological, radiological agents, and naturally occurring health threats.

2) Decrease the time needed to classify health events as terrorism or naturally occurring in partnership with other agencies.

Detect/Report:
3) Decrease the time needed to detect and report chemical, biological, radiological agents in tissue, food, or environmental samples that cause threats to the public's health.

4) Improve the timeliness and accuracy of information regarding threats to the public's health as reported by clinicians and through electronic early event detection, in real time, to those who need to know.

Investigate:
5) Decrease the time to identify causes, risk factors, and appropriate interventions for those affected by threats to the public's health.

Control:
6) Decrease the time needed to provide countermeasures and health guidance to those affected by threats to the public's health.

Recover:
7) Decrease the time needed to restore health services and environmental safety to pre-event levels.

8) Increase the long-term follow-up provided to those affected by threats to the public's health.

Improve:
9) Decrease the time needed to implement recommendations from after action reports following threats to the public's health.